CONTESSA MATIC

(10.0634)

(1961)

CONTESSA

(10.0632)

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SERVICE MANUAL

ZEISS IKON

Published March 1961

Repairing instructions

Contessa matic, Cat.No. 10.0634

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Zeiss Ikon AG
Stuttgart

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Zeiss Ikon A.G.
Stuttgart

General Notes

The Contessa matic, Order No. 10.0634, incorporates the following features:

Shutter : Prontor-SLK Special with speeds from 1 sec. to 1/500 sec., MX-synchronisation and self timer.

Lens : 50 mm Tessar f/2,8 with front lens focusing.

Exposure meter : coupled with the shutter, with follow-up pointer externally visible.

The brightline frame finder is very similar in construction to that of the Symbolica 10.0635. Various parts employed in the Symbolica 10.0635 are also used in the Contessa matic, e.g., counter mechanism, film transport, rewind mechanism, camera back.

Care should be taken when repairing the camera that all conditions stipulated in the instructions for both assembly and repair are met. Moreover, the performance of the camera should accord with the standards given in the Testing Instructions (pages 25 - 28).

Special attention must be paid when repairing components made of plastics, since these are easily scratched and also affected detrimentally by most cleaning agents. Even the fumes of trichlorethylene, perchlorethylene, methyl chloride or acetone may lead to a dulling of the surfaces. Excessive rubbing during cleaning should be avoided since it may result in electro-static charging which will attract dust.

Note ! When ordering spare parts, both the order numbers and the names of the parts (as outlined with bold lines in the spare-part list) should be quoted.
Slight variations may be encountered as a result of technical improvements.

Dismantling

Counter mechanism, top capping (Ill. 1, 3, 4, 6)

Use pliers 527/24 CM/82 for unscrewing nut 26, remove counter disc 36, threaded nipple 34 (left-hand thread) using key 56-00.000/800 and remove control ring 23 and control spring 18; remove oval-headed screw 35 and screw 58.
Carefully lift top capping ass. 221 (222), unsolder control wire 143 from flash-nipple.
Nowadays, top capping ass. 221 is replaced by capping 222, which has the advantage of being lifted out without dismantling the counter mechanism first.
For lifting out the top capping ass. 222 (Ill. 6) remove the two oval-headed screws 35.
It is also possible to assemble top capping ass. 222 instead of top capping 221 for which the following parts are needed: wedge ass. 105 and 1 oval-headed screw 35.

Exposure meter with finder (Ill. 5, 8, 9)

In order not to damage the follow-up pointer of the exposure meter when dismantling it is expedient to turn the aperture 84 in the direction of the short exposure times until it stops. Only then should the 2 screws 51 be removed and the exposure meter compl. 237 with finder taken off.

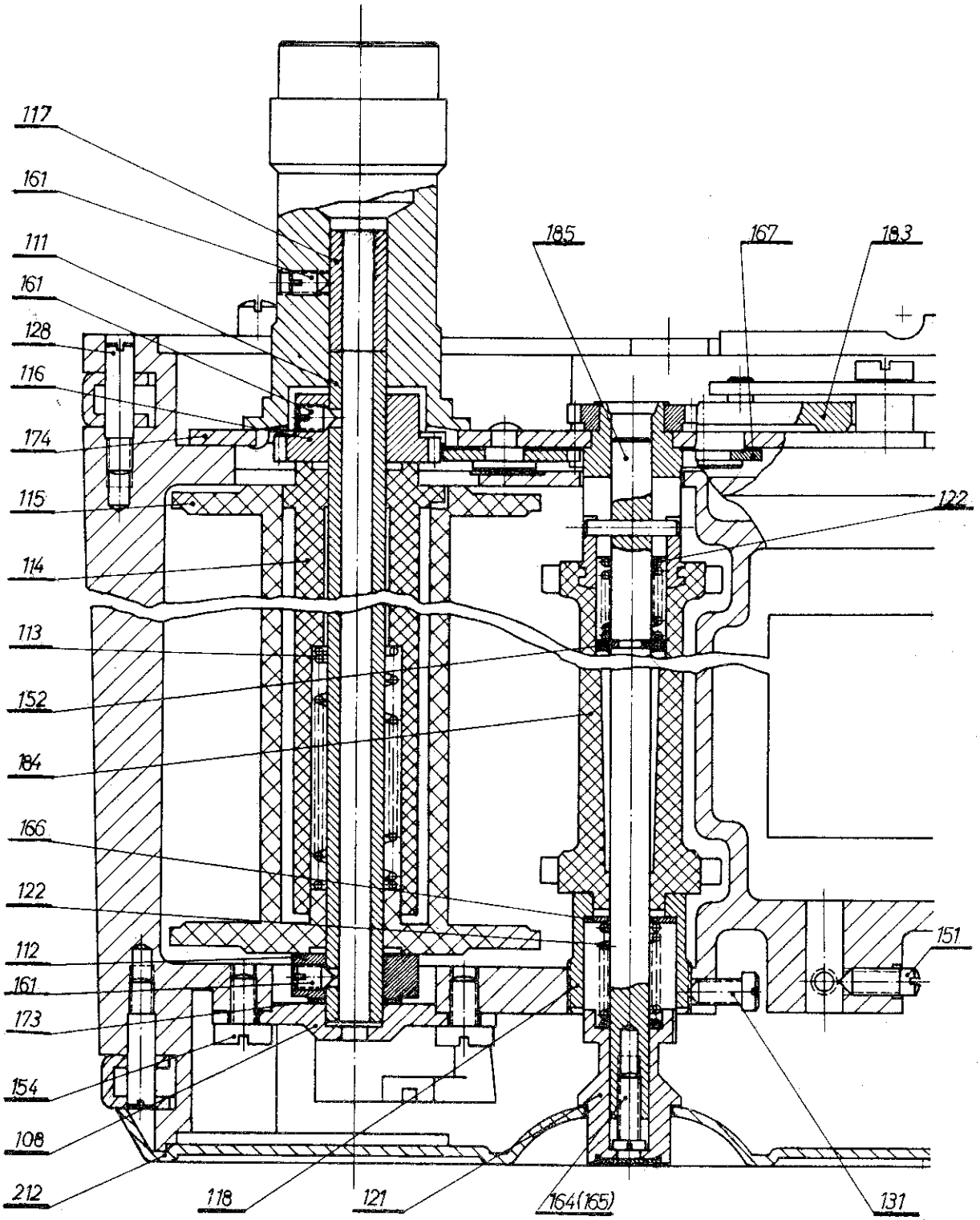
Shutter - Lens (Ill. 3, 13, 14)

For dismantling the shutter first remove the 4 screws 52 (Ill. 3) which hold the front plate 322 on the camera body. Remove front plate with shutter. The shutter can be removed from the front plate after 4 screws 318 (321) have been unscrewed. Take care of spacers 311 - 316, using them again when re-assembling. The sharp focusing of the lens is not normally affected provided all spacers are re-employed correctly.

Rewind-mechanism (Ill. 7, 15, 16, 17)

Remove washer 152 (Ill. 15), lift out spur wheel 126 and washer 148. The spool lever compl. 188 can now be taken out from below (or through cap ass. 212). Cap ass. 212 is fixed with 2 screws 163. Plate ass. 202 is held by 2 screws 154.

For removing the holding mechanism for the spool lever compl. 188 (cam 124, lever 125 and lever ass. 186 with torsion spring 187), loosen the threaded pin 151 (Ill. 3).
No more dismantling instructions are needed with regard to the camera. After re-assembly, no washers or spacers should be left over; all of them should have been placed into their original position.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Assembly and Repair instructions

The instructions for assembly and repair given here describe the re-assembly of a completely dismantled camera; complete dismantling is not always necessary, so it has to be decided from case to case how far a camera has to be dismantled.

Film Spool (page 2)

Insert film spool 115 into the right-hand spool chamber so that its large opening is on top. The spool axle 111 with ring 112 (pin 161 engages the bore hole 2,9 mm from the end of the spool axle) should then be placed from below through the body and film spool. Place washer 173 on ring 112 and screw bearing flange 108 to the base of the h. housing using 2 cylinder screws 154. Place pressure spring 113 and bush 114 into film spool from above. Slip spur wheel 116 (with toothed rim against bush) on to spool axle and screw tight. Screw 161 will engage the bore hole 4 mm from the end of the spool axle.

Film Sprocket Roller (page 2)

Insert axle ass. 185 with pressure spring 122 and locking washer 152 into the sprocket roller 184 from above. Place sprocket roller into body. Screw bush 118 into body (its inner, reinforced thicker part pointing towards the sprocket roller), so that the bush is flush with the outer surface of the body. Secure bush with screw 131 but do not tighten .

Tube (111, 7, 12, 15)

Insert axle ass. 123 into housing 106 and secure with threaded pin 162. Place cup cam 83 on tube 75 that the feeler scans the cam surface. Place washers 73 between ring 72 and cup cam 83, as required. The cam should run smoothly and unretarded. Fasten ring 72 with 2 screws 74 from the inside of the tube. Check performance of cam and apply grease FM 6 to cam surface. The feeler should not stick even though the cup cam ist moved very slowly. Place tube 31 into body, insert winding wheel 32 together with tube compl. 71 and secure with 3 screws 54.

Body contact for flash connection (111, 12)

Insulating piece 146, contact spring 147 with soldered control wire 143 and washer 171 should be placed into the recess in the front of the housing and secured with screw 172. The control wire is guided upwards and fitted into the channel provided on the upper side of the housing. Follow up with an insulation test according to no. 31 of the testing instructions, applying the voltage specified therein to the housing (on one side) and to the contact spring (on the other).

Base Plate ass. (111, 7, 18, page 2)

Fit from above spur wheel 183 to base plate ass. 174 and secure with locking washer 167. Spur wheel 183 should run easily and without jamming.

The pre-assembled base plate is then placed on the body and held in position. Check the correct engagement of teeth by rotating film spool 184. Before screwing-on the base plate using 2 cylinder screws 155, place locking spring 135 and washer 169 beneath the inner screw. Slide the bush 117 from above through the hub of the base plate ass. 174 on to the spool axle 111 and secure with threaded pin 161 so that the film spool has about 0,1 mm play.

Slightly loosen screw 131, bush 118, so as to leave an airspace of 0,1 mm between bush 118 and sprocket drum 184. (Use small pieces of 0,1 mm sheet metal for this purpose). Tighten screw 131 in such a way that the bush will not become untwisted nor pressed into an oval shape by the screw 131.

Check the entire film transport mechanism for satisfactory performance.

Release Flap (Ill. 16)

2 cylinder screws 156 should be screwed to the bed plate of the housing by a few turns only. Position release flap 132 and spindle 133 with torsion spring 134. The torsion spring is slipped on to the spindle so that the longer end of the spring butts against the bed plate whilst the shorter end lies on the flap 132, pressing it downwards (see Ill. 16). Spindle 133 is held in position by 2 cylinder screws 156 but should not be screwed on too tightly.

Rewinding (Ill. 7, 15, 16)

Insert the base plate ass. 202 into camera housing and secure with 2 screws 154. Spool lever compl. 188 with locking plate 144 and pressure spring 145 should now be fitted from below through the housing and the bearing hole of the plate ass. 202. Slip washer 148 and spur wheel 126 (burred edge facing downwards) over the end of the axle. The spool lever is secured with locking plate 152. The axial play of the spool lever is not to exceed 0,1 mm.

Turn camera upside down and place lever 125 on housing base (Ill. 16) and lever ass. 186 together with torsion spring 187 on top. Fit cam 124 into housing and secure with threaded pin 151 (Ill. 3). Hook torsion spring 187 as shown in Ill. 16 (top). Final adjustment of cam 124 follows later (page 9) when the cap 212 has been mounted.

Test : In unfolded position the crank of the spool lever 188 should rotate easily and without jamming, engaging the catch of the film rewind on plate ass. 202.

When the crank is folded-in, the catch should be de-coupled. Its friction should not exceed 60 cmg.

Traveller ass. 203 (Ill. 7, 12, 14)

Hook draw spring 142 to the peg on the housing (Ill. 7) and secure with grip ring 168. Place traveller 203 on the riveted brass bushes of the base plate and test for performance. The traveller should move freely and smoothly over the entire length of its guide slots. Fit 2 cylinder screws 153 (free from grease but with safety lacquer around the thread) into the brass bushes and tighten the screws. When screwing-in the 2 cylinder screws attention should be paid that the two pins of the winding wheel 32 are in an almost horizontal position when the traveller ass. 203 is in its normal position. (Ill. 12). Check again the performance of the traveller. Hook spring 142 to the slot in the traveller.

Rotate spur wheel 183 in clockwise direction until one of its pins butts against the traveller. Hold traveller and spur wheel at their highest position and adjust the locking spring 135 by moving it until the spur wheel 183 is almost free from play. Under no circumstances should the locking spring recoil against the flank of any tooth resulting in the pin of the spur wheel 183 pressing against the traveller 203 which would then not be moved back to its normal position by the action of the draw spring 142. Repeat testing the other bolts of the spur wheel 183 (turned through 180^{0}) and tighten cylinder screw 155.

The mesh of locking spring 135 into the teeth of the spur wheel should be gentle to prevent noisy winding.

Front panel - shutter - lens (Ill. 7, 11, 13, 16)

Insert into front panel the bush 305, pressure spring 306 and bolt 307 with locking plate 317, using washers 311-316 as required. Use 4 screws 318 (321) for screwing shutter 324 to front panel. Position washer 37 (Ill.13). Prior to mounting front panel with shutter on the camera body (aperture ring 84, shutter speed ring 42, etc., are not yet in position), it is important that :

a) the shutter has run-off completely

b) the traveller 203 is at its terminal position (Ill. 7)

c) The winding wheel 32 should be positioned as described under "Traveller ass. 203" (Ill. 12)

Now place front panel with shutter in position on the Camera body so that :

d) the bolt 307 correctly touches contact spring 147

e) the nut 33 lies in the recess of the release flap 132.

Screw on front panel using 4 screws 52 (use special screwdriver 526/24 M/81, Ill. 3).

It is also possible to mount front panel with shutter on the camera body when all rings (speed ring 42, aperture ring 84, etc.) are already assembled.

Pay attention to the following:

The instructions given in a, b and c should have been followed.

The cup cam should be positioned as described in Ill. 12 and the side of the spring 104 should be positioned so that it engages in the guide slot of the cam when the camera is mounted.

(Side of spring 104 is exactly opposite the shutter cocking-axle.)

Place front panel with shutter on camera body paying attention to points d and e.

Fix front panel with 4 screws 52.

Test: When the aperture ring 84 is rotated, the lever on tube 82 should move simultaneously.

Set to 100 ASA, the aperture ring should be rotatable from stop f/2,8 at a shutter speed setting of 1/4 sec. to f/22 at a shutter speed setting of 1/500 sec.

Lens setting should conform to point 33 of the testing instructions.

Film speed ring 64 (65) should be positioned and spring compl. 104 placed so that the side of spring 104 engages in the guide slot of cam 83. Fix spring 104 with 2 screws 55. Adjust aperture ring compl. 84 so that the small end of the shutter-aperture-ring engages the small notch of the aperture ring 54. Place shutter speed scale ring 43 and position with threaded pin 57. (Lacquer threaded pin 57). Insert speed setting ring 42 so that its inner recess engages in the shutter speed cam and catches the outer lug of the shutter aperture-ring. Use 2 screws 56 to fix depth-of-field ring 41, employing washers 44 (45) as required. Adjust operation of aperture ring 84 and shutter speed setting ring 42 by means of washers 44 (45). Both aperture ring 84 and shutter speed ring 42 should run evenly.

Back-locking Catch (Ill. 3, 4)

Catch 136 with pressure spring 138 should be fitted to the side wall of the camera body that the pressure spring engages in the recess of the body. Whilst holding both the catch and spring in this position, place 2 rings 137 into the guide slots of the catch, put on cover plate 141 and secure with 2 countersunk screws 157.

Camera Back (Ill. 3, 7, 16)

The camera back is fixed to the body with 2 threaded pins 128. Apply safety lacquer to the threads of these pins.

Note ! Ordering Spare Parts !

When ordering a new camera back it is not sufficient to quote the serial number of the camera under repair, but the damaged back must also be returned to us.

Tensioning Lever (Ill. 4, 7, 12, 19)

Insert the spur wheel 11 so that lowest point of the traveller key-way is separated by 2 teeth from the screw 128 (Ill. 7) . Place on top of the sleeve 12 a paper washer 14, then the tensioning lever 17, a steel washer 15 and a spring washer 16. Screw together with 3 cylinder screws 53. Slide pin 13 into the bore hole of the sleeve 12 and place the assembled tensioning lever on the hub of the base plate 174. Slide torsion spring 27 over sleeve 12 and hook into lug of the tensioning lever 17. Position release rod 25 (with lever 66 and screw 62). The release rod 28 (with spring 24 and washer 61) and flange ass. 62 with leaf spring 21, washer 22 (optional) and screw 58 on the hub of base plate 174. Hook torsion spring 27 after one complete turn for tensioning into the spring rivet of flange 65. Insert release nipple 25 and tighten threaded nipple 34 provisionally.

Adjusting the Traveller (Ill. 7, 14)

Traveller 203 can be adjusted by two different methods :

a) with mounted tensioning lever 17

b) without tensioning lever using key 527/24/82 in its place.

Release and tension the shutter so that the traveller 203 takes up the furthest possible tensioning position. During tests, observe whether the draw spring 208 is tensioned just before the traveller reaches the end position. In fact, the draw spring 208 should be just about to be tensioned when the traveller reaches its highest position.

Adjustment is made as follows :

When the traveller is at its highest position, loosen cylinder screw 211 (1/4 - 1/2 turn) and rotate cam 206 (key 52-01, 076/800) so that its stop can be felt on the traveller. In this position tighten and lacquer screw 211.

Spring is tensioned during test winding : right-hand turn of cam.

Shutter runs off by itself during test winding : left-hand turn of cam.

Adjusting the Lever (Ill. 12, 19)

Tension and release the shutter several times. The lever 17 will travel slightly beyond both stop positions. By pressing the sprocket roller to the left, i.e., in the direction of the backwards-moving film, slowly moving the tension lever, the transporting movement of the film sprocket roller will start only after a slight idling of the tensioning lever. When the tensioning lever has been swung to its positive stop and slowly let go again (sprocket roller again lightly pressed in direction of the backwardsmoving film), a play can be observed between the stops of the lever and those of the sprocket roller. Both these idling movements should be of approximately identical duration. It is permissible for the idling period to be slightly longer at the beginning of the lever's swing motion than that at the end, but never in the reverse order. Correct adjustment of the idling period can be obtained by moving the lever 17 towards the sleeve 12 after 3 screws 53 have been loosened.

Exposure meter, finder (Ill. 5, 8, 9)

The assembly of the finder can be seen in Ill. 5.

Care should be taken to ensure that the coated side of the mirror 268 is placed to the rear and in the direction of the eyepiece lens 266. The coated side of the mirror 264 is placed near the front and in direction of the mask 258.

The brightline frame should be aligned to the image field of the camera.

See Test Instructions Nr. 34 and 35.

Set shutter to 100 ASA, shutter speed of 1/500 sec. at f/22, by this the lever 82 on the tube 71 will move backwards in direction of the camera back 213. Mount exposure meter compl. 237 (including finder) on the camera body using 2 screws 51 and ensure that the lever 295 is in front of lever 82 .

When the aperture ring 84 is rotated, the follow-up pointer of the exposure meter should move also without sticking. Lever 82 should move without obstruction along its track in the exposure meter.

Exposure meter - Zero position

The zero-position should be tested when the photo cell is completely covered. The position will be correct when, set to 16 ASA, the aperture ring 84 is turned in the direction of "B" until it stops and the exposure meter pointer lies below the outer edge of the follow-up pointer, which is to say, outside the measuring range (see Test Instructions No. 27).

The zero-position is obtained by adjusting the cam on lever 82. Screw 38 (Ill. 3) should be screwed in.

Exposure meter calibration

The exp. met. calibration can be tested only when the instrument is assembled in its working position, which is to say, only in conjunction with the camera. Both aperture and speed values are set on the camera according to the table of the Beli-Prüfkoffer VE 33 (exposure meter test case VE 33). Calibration corrections in the upper measuring range can be obtained by changing the resistor. In the lower measuring range the calibration correction can be effected by changing either the disc 276 or the photo cell 251 if necessary. The permissible deviation of the calibration values is ± 1/2 stop max.

With the Contessa matic 10.0634, resistors of between 16 and 40 kOhm are generally used. Resistors up to 20 kOhm rising by steps of 0,2 kOhm are available. Above 20 kOhm the steps rise by 0,5 kOhm.

The resistor values are denoted by either colour rings or colour dots.

Colour	1st ring or dot = 1st fig.	2nd ring or dot = 2nd fig.	3rd ring or dot = number of zeros	4th ring or dot = tolerance
black	0	0		
brown	1	1	0	
red	2	2	00	
orange	3	3	000	
yellow	4	4	0000	
green	5	5	00000	
blue	6	6		
violet	7	7		
grey	8	8		
white	9	9		
gold				± 5%
silver				± 5%

Compute tolerances by reading from left to right with tolerance ring (gold or silver) at right-hand side.

Example :	violet	grëan	red	silver				
	7	5	00	± 10 % =	7 500 Ohm	=	7,5 kOhm	± 10 %
	green	orange	red	silver				
	5	3	00	± 10 % =	5 300 Ohm	=	5,3 kOhm	± 10 %
	brown	red	orange	silver				
	1	2	000	± 10 % =	12 000 Ohm	=	12,0 kOhm	± 10 %

To compensate for the effects of temperature on the calibration, the Contessa matic has been fitted with thermistors of between 8 and 16 kOhm.

When repairing exposure meters fitted with thermistors the following facts should be considered :

1) Thermistor and resistor are coupled in series.
2) The thermistor is highly temperature-responsive. Resistor measurements should be taken at 20 - 25° C (68-77°F). After soldering, it should be left to cool off.
3) The thermistors are extremely sensitive to mechanical stress.
4) Resistance values are here denoted by 2 colour dots on the body of the resistor. The greatest possible care should be exercised when bending ends of wires and when adjusting them after soldering.

Colour code: The colour dots denote the resistor values in kOhm. The dot next to the front denotes the full kOhm-value, the second dot near to the centre of the body denotes the first digit after the decimal point.

Key to code:

0 = Black	5 = green
1 = brown	6 = light brown
2 = red	7 = dark brown
3 = orange	8 = grey
4 = yellow	9 = white

Example: 5,8 kOhm = green - grey

6,2 kOhm = light brown - red

The share of the thermistor (stabilizing resistor) in the entire resistor value should be 30 - 40 % .

Example:

Standard resistor	= 16 kOhm
Thermistor	= 8 kOhm
Total resistor value	= 24 kOhm

Top capping (Ill. 3, 6)

Solder control wire 143 to the flash contact inside the top capping. Position finder eyepiece 228, put on top capping 221 (see that wire 143 does not get caught) and secure with screw 35 and screw 58. Top capping 222 should be fixed in position with 2 screws 35 after wedge 105 has been attached to flange 62 by means of 2 screws 58.

Frame Counter (Ill. 1, 4, 5)

Loosen threaded nipple 34, insert control spring 18 with control ring 23 on top and tighten threaded nipple 34 (left-hand thread) with key 56/00.000/800. Both control spring 18 and leaf spring 21 should be adjusted for possible over-draw when in this position. Rotate the control ring 23 so that the tips of the springs can be observed through its slots. When tensioned, leaf spring 21 should engage the teeth of the control ring in time for the control ring to make just one more movement of 0,2 - 0,4 mm before the cocking lever comes to a stop. When the cocking lever travels back, the control spring 18 should lock-in in time for the control ring to make an idling movement of 0,2 - 0,4 mm before the lever reaches its rest position. Adjustment can be made by moving the leaf spring 21 after loosening screw 58.

Counter Disc (Ill. 1, 4)

Insert counter disc 36 in such a way that an imaginary line cutting through figures 10 and 30 on the scale runs parallel to the camera back (number 1 on the disc facing rear of camera back). Follow this coarse alignment by positioning the counter disc so that one stroke mark is exactly opposite the black index mark on the control ring 23. In this position use shearing tool 527/24 CM/82 to shear-in the counter disc opposite the recess. Use pliers 527/24 CM/83 (optional) for adjusting nut 26 and tighten it with pliers 527/24 CM/82. Secure with [illegible] acrylate chrome safety lacquer.

Adjusting release and "B" setting (Ill. 1, 4, 16)

Tension and release the shutter several times. Set shutter to " B " . Slowly release the tensioned shutter, closely observing the travel of the release nipple 25 from the moment of release to its final stop. Let the release nipple 25 come up very slowly and watch carefully its movements between closing the shutter and the rest position of the release nipple. These two idling movements should be of approximately identical duration. Adjustment by slotted nut 33 : special screwdriver 26 376 T/80. Apply lacquer to slotted nut 33.

Capping 212 with Plunger 121 (Ill. 2, 16, 17 and page 2)

Screw-in cylinder screw 164 (165). Slip washer 166 and then pressure spring 122 over axle of sprocket roller and place plunger 121 on top. Fix capping ass. 212 with 2 countersunk screws 163 and adjust de-coupling of film sprocket using screw 164 (or 165 as required), so that following conditions are fulfilled :

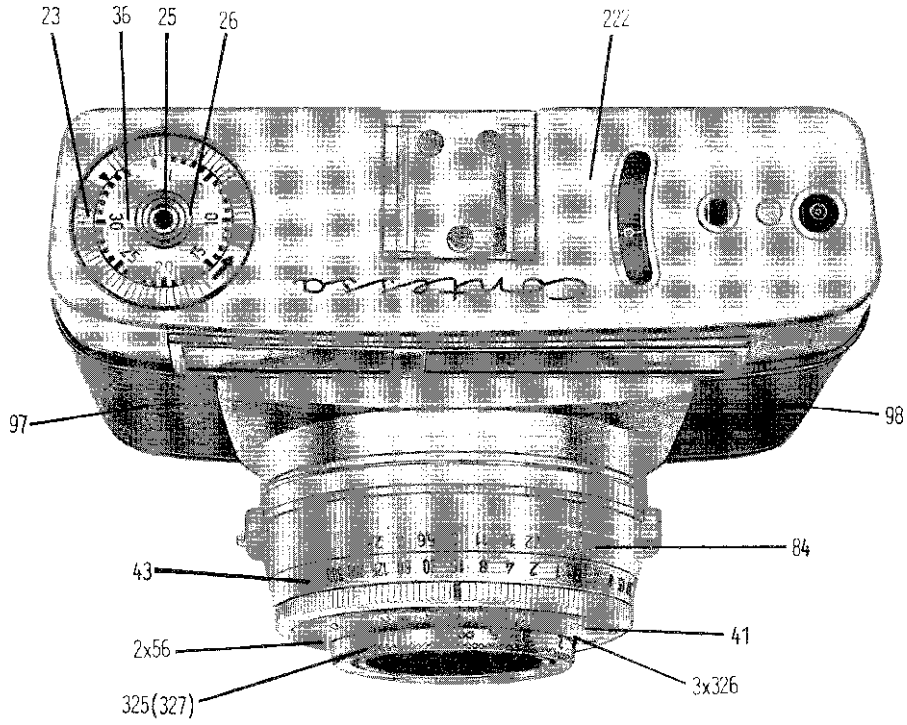
1) When completely depressing plunger 121, the spool lever 188 must spring out and the film sprocket should be de-coupled completely. (Use screw 164 (165) for adjustment).
2) When depressing spool lever 188 into its rest position (Ill. 2), plunger 121 should spring up and couple with the film sprocket.

For adjusting conditions 1 and 2, use screw 164 (or 165 as required) which can be reached with a thin screwdriver through plunger 121. The spool lever 188 should be held tightly when pressing it home into capping ass. 212. Adjust by rotating eccentric cam 124 after loosening threaded pin 151 (Ill. 3). Follow up by tightening threaded pin 151 again and secure with lacquer. Repeat tests as described on page 4 (see : rewinding).

Fault - finder Key

Fault		Cause	Remedy
1.	Film partly or entirely unexposed	Shutter does not open	Repair according to instructions for Prontor SLK shutter
2.	Double exposure or film is not advanced	Spool leever 188 not pressed home completely	Depress spool lever until it comes to a complete stop
3.	Irregular frame spacing	Locking spring 135 either brocken or bent	Replace spring and adjust according to instructions on page 4
4.	Unsharp pictures	Lens focusing ring is loose	Adjust lens using collimator for re-setting, tighten focusing ring
		Lenses greasy or dirty	Clean lenses carefully
5.	Over-exposed pictures	Exp.meter calibration is inaccurate	Correct calibration using Beli-Prüf-koffer VE 33
		Exp.meter pointer jams	Remove obstruction. Replace exp.meter if pivot point is faulty
6.	Under-exposed pictures	Exp.meter calibration is inaccurate	Test and correct calibration, using Beli-Prüfkoffer VE 33
7	Torn perforation of Film	Film cartridge movement is obstructed	Replace with faultless film cartridge
8.	Scratched film	Faulty cartridge	Exchange for faultless cartridge
		Faulty pressure plate	Fix new pressure plate
		Damaged film track	Repair damage
9.	Cocking lever cannot be operated or does not complete its travel	Traveller 203 jams	Correct movement of traveller 203
		Spur wheel 183 moves too hard	Correct movement of spur wheel 183
		Cogwheels obstructed by foreign bodies	Remove obstructions
10.	Counter mechanism fails to advance	Tooth broken on control ring 23	Change control ring 23
11.	Exp.meter pointer fails to deflect	A break in the feed line, a soldered connection or in the exp.meter	Use circuit tester for locating break in transmission
		Photo-cell is damaged	Test photo-cell using Beli-Prüfkoffer VE 33 Pay attention to current limiter in circuit tester. Flow of current below 50 µA
12.	B does not close	Nut 33 is displaced	Adjust nut 33 according to instructions page 9, lacquer.
13.	B short-circuits	B - control lever in shutter is defective	Exchange B - lever
14.	Shutter is released during tensioning	Shutter release lever sticking	Repair lever movement; exchange lever, if required

Fault		Cause	Remedy
15.	Indicator jams	Foreign body obstructing movement	Remove obstruction
		Both pointers stick together	Straighten-out with tweezers
16.	Follow-up pointer jams	Scanning-pin or scanning-lever sticking	Repair movements
17.	Spool lever 188 cannot be pressed home completely	Cam 124 is displaced	Adjust cam 124 (see page 9)
18.	Spool lever 188 fails to jump out when plunger is depressed	Cam 124 is displaced	Adjust cam 124 (see page 9)
19.	When rewinding, film transport fails	Spur wheel 126 has too much axial play	Reduce axial play to 0,1 mm max. Burr-edge of spur wheel points downwards in direction of rewind spool plate 202
		Spur wheel is defective	Change spur wheel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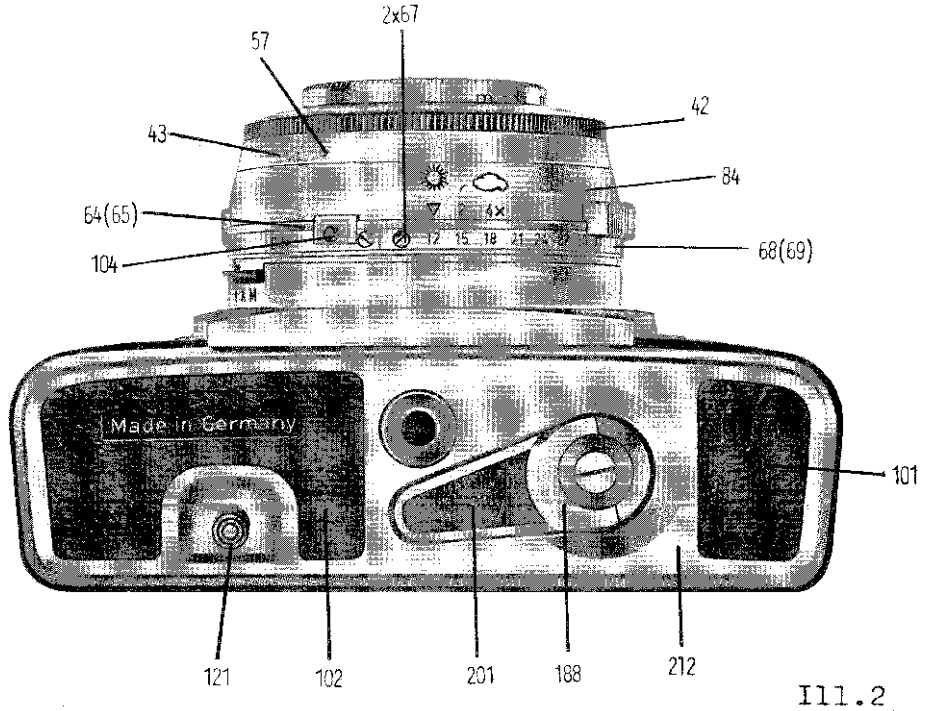
Ill. 1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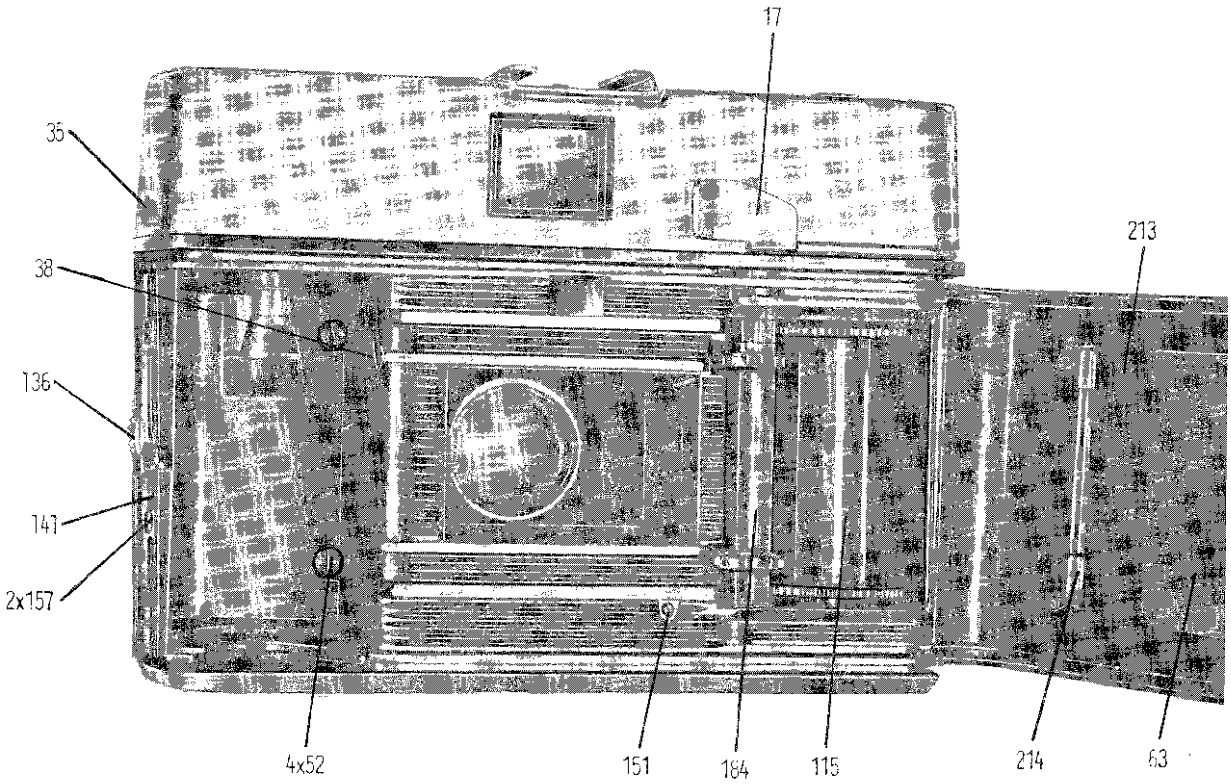
Ill.2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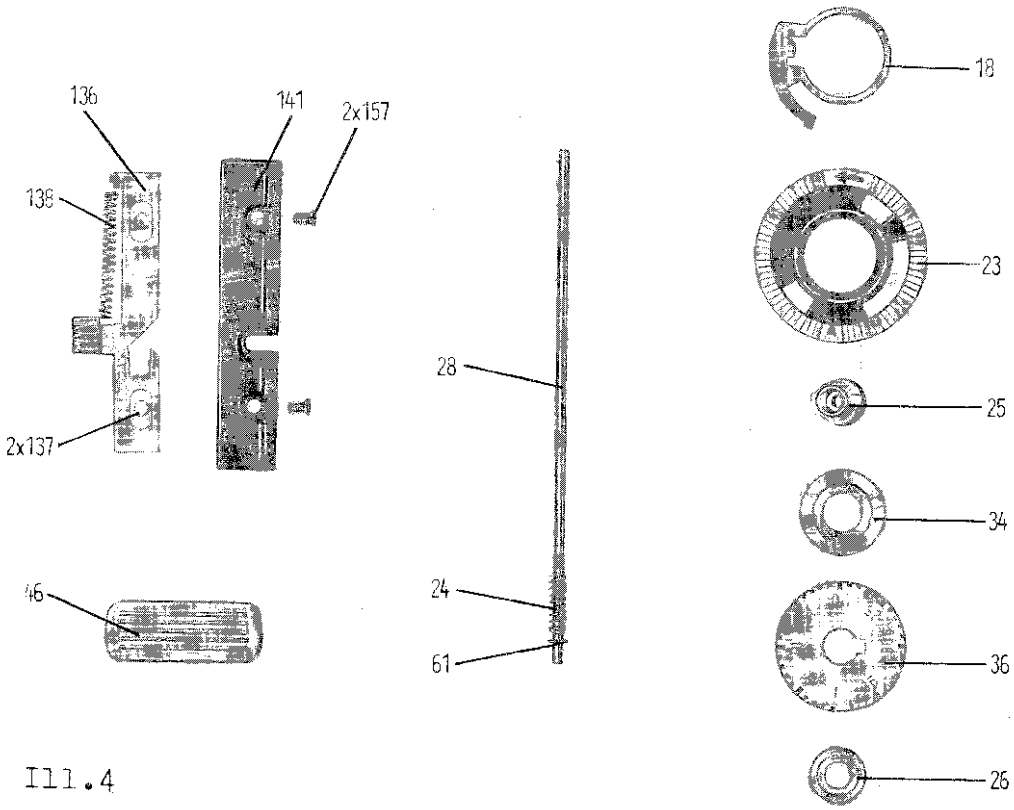
Ill.3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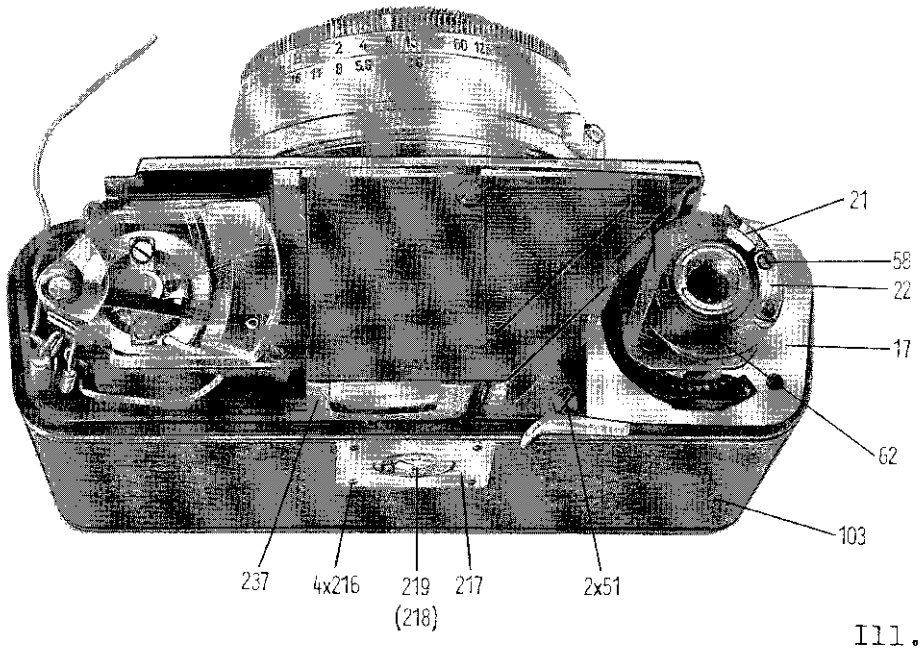
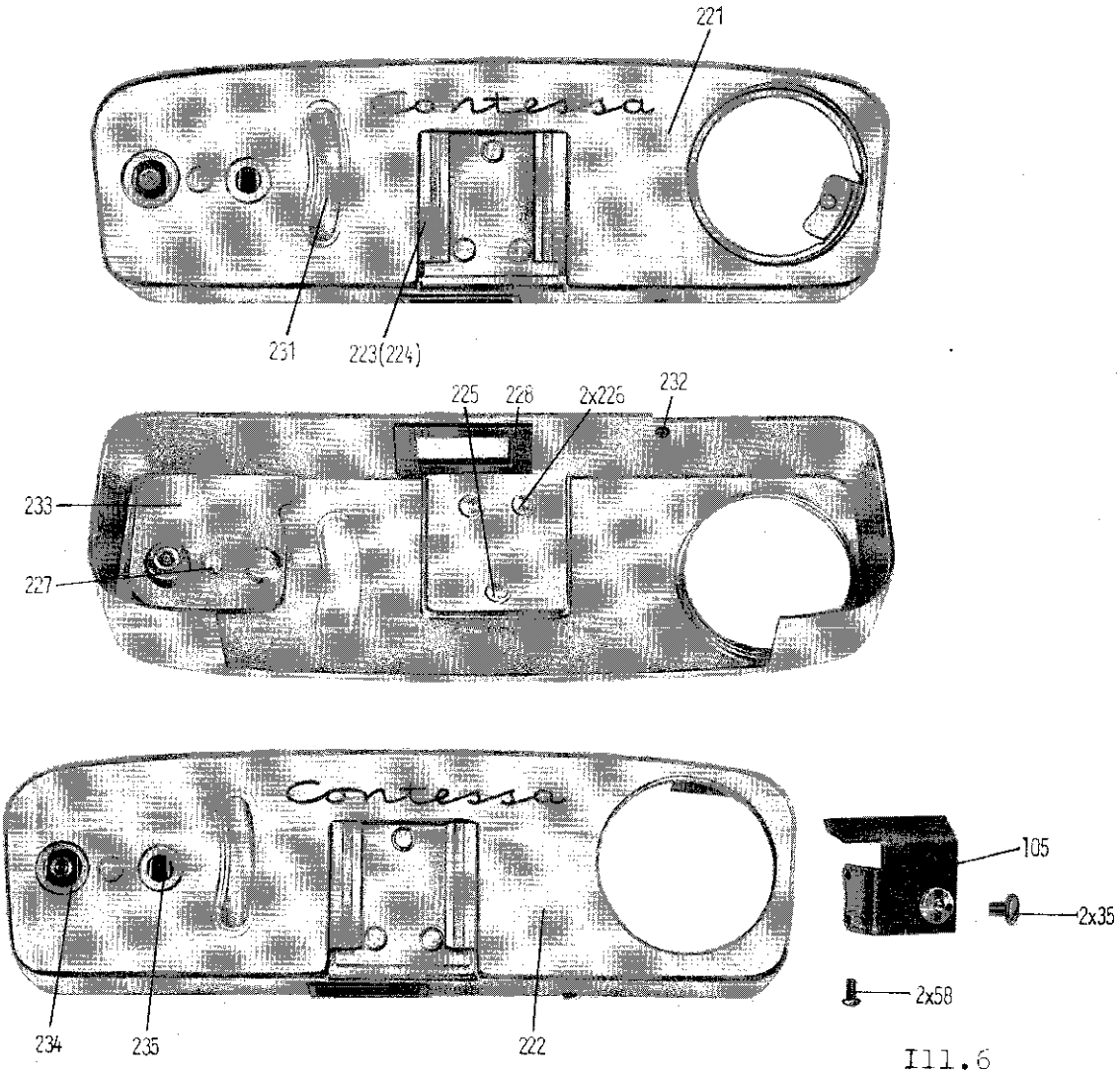
26

Ill.4


21
58
22
17
62
103
237
4x216
219
(218)
217
2x51

Ill.5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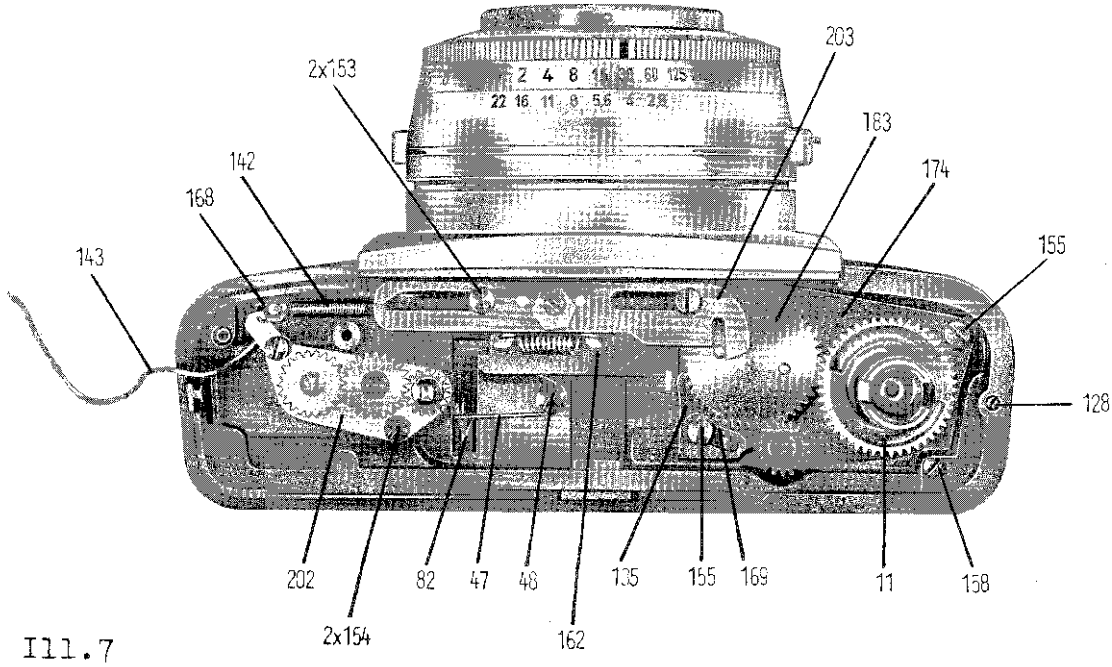
231
223(224)
225
228
2x226
232
233
227
234
235
222
105
2x35
2x58

Ill.6


2x153
203
163
174
142
168
143
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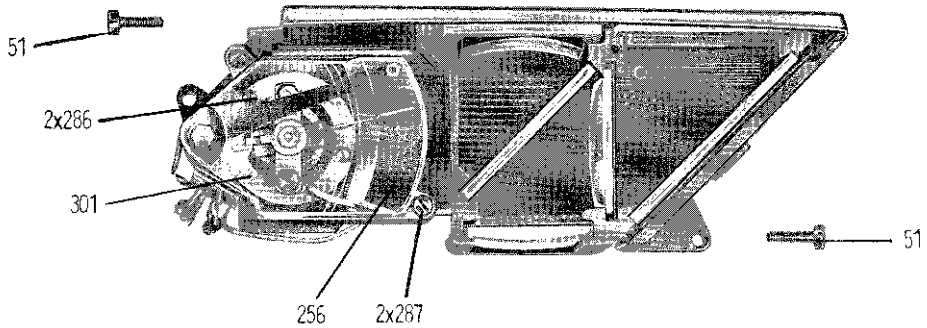
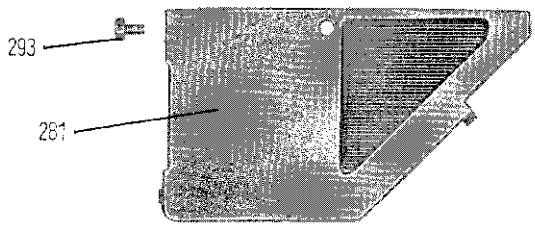
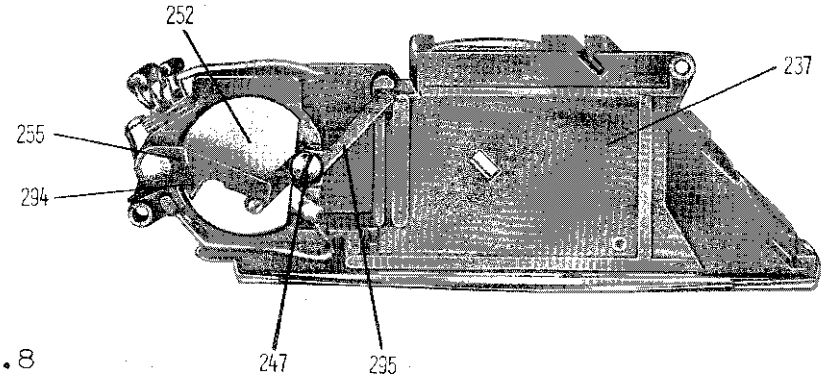
128
202
2x154
82
47
48
162
135
155
169
11
158

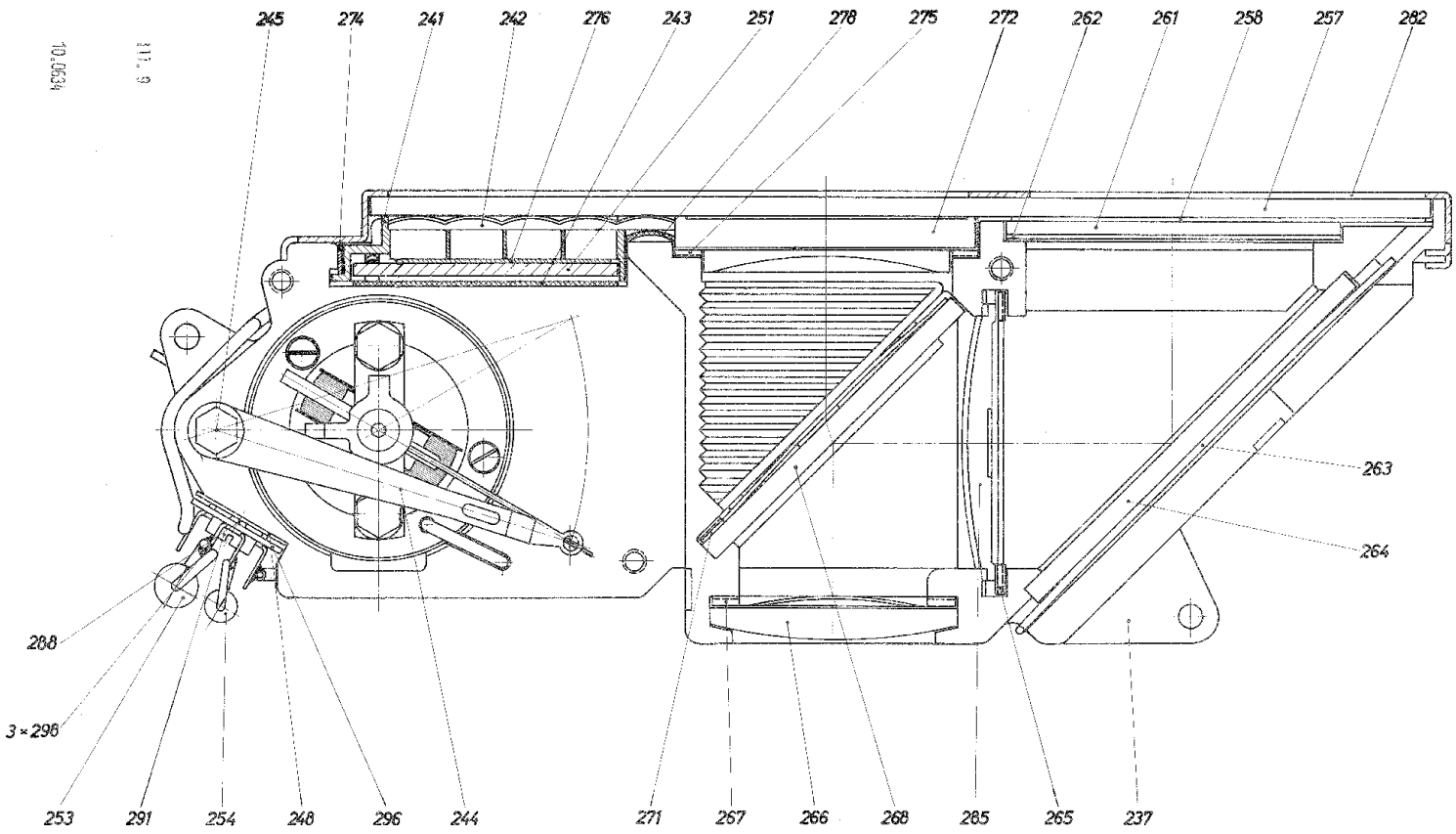
Ill.7


51
2x286
301
51
256
2x287


293
281


252
237
255
294
247
235

Ill.8


245
274
241
242
276
243
251
278
275
272
262
261
258
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282
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3×298
253
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254
248
296
244
271
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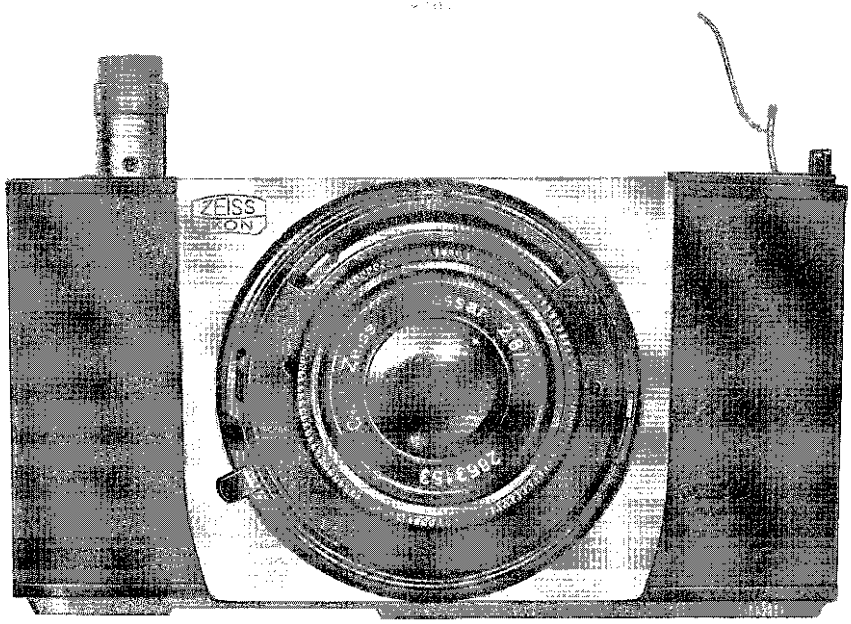
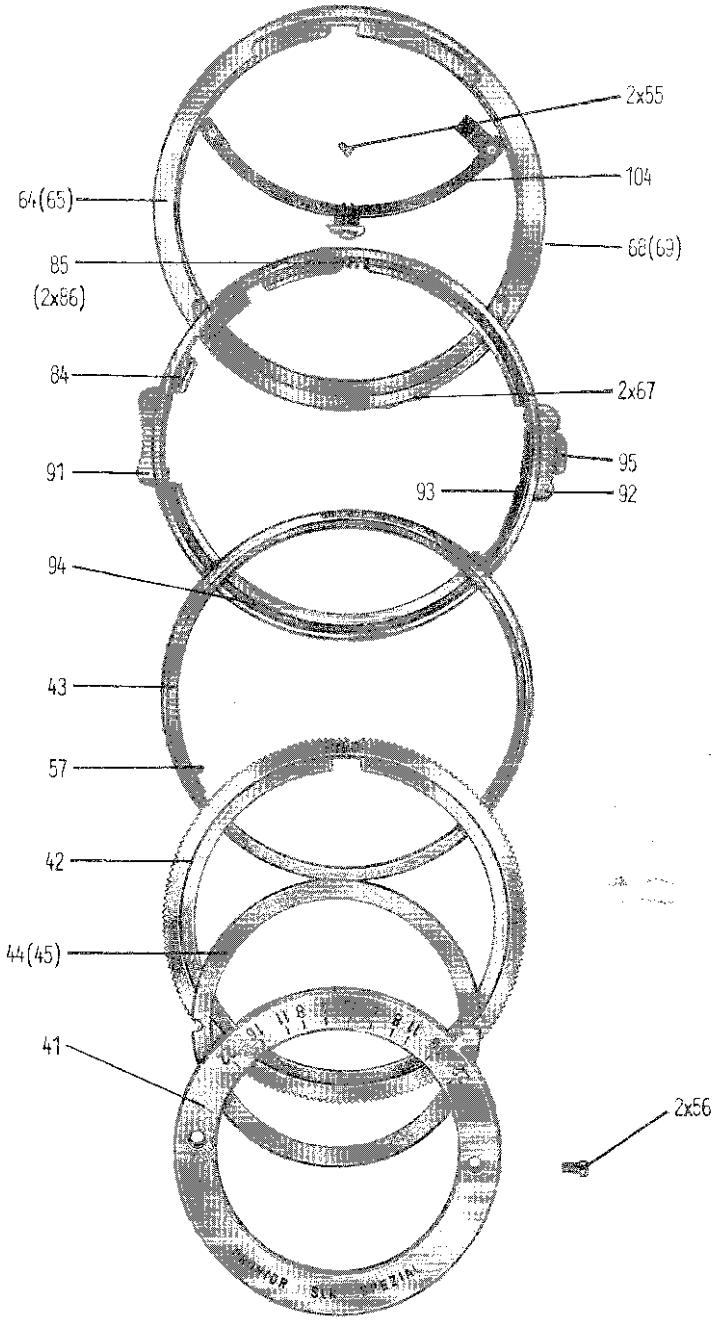
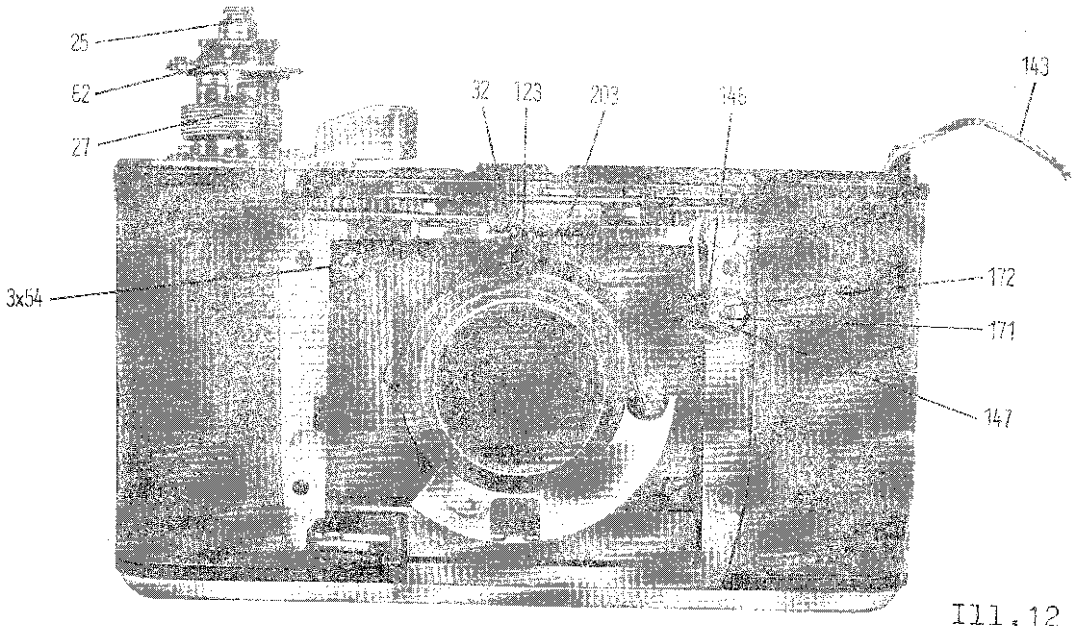
268
285
265
237


ZEISS
IKON

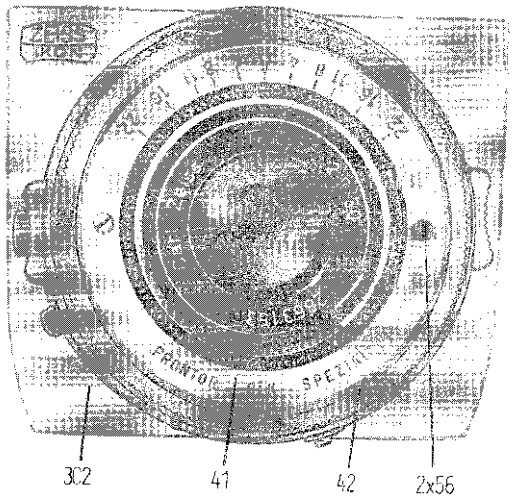
Ill.10


2x55
104
64(65)
68(69)
85
(2x86)
84
2x67
95
91
93
92
94
43
57
42
44(45)
41
2x56

Ill.11


25
62
27
32
123
203
146
143
3x54
172
171
147

Ill.12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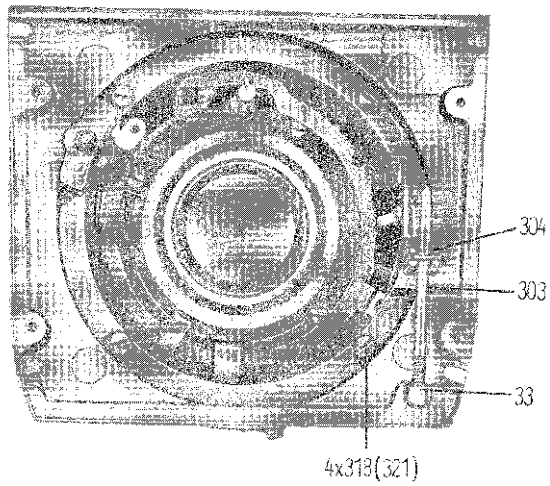
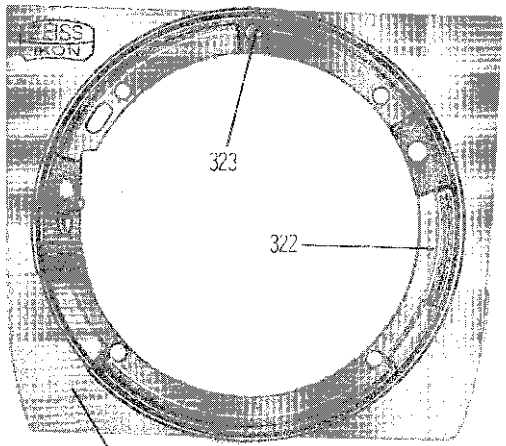
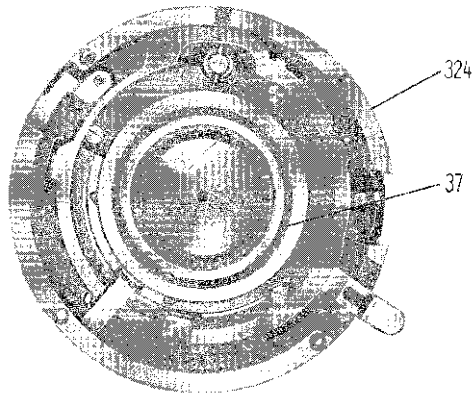
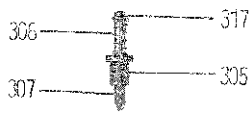
41
42
2x56

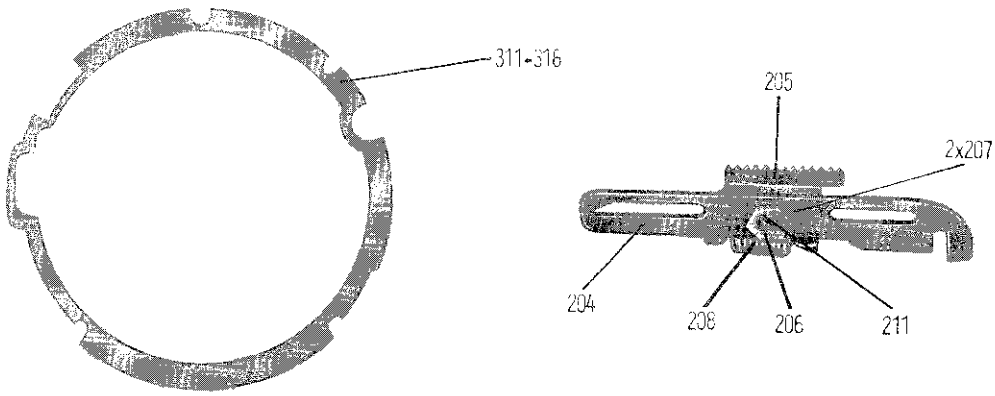

304
303
33
4x318(321)


323
322
308

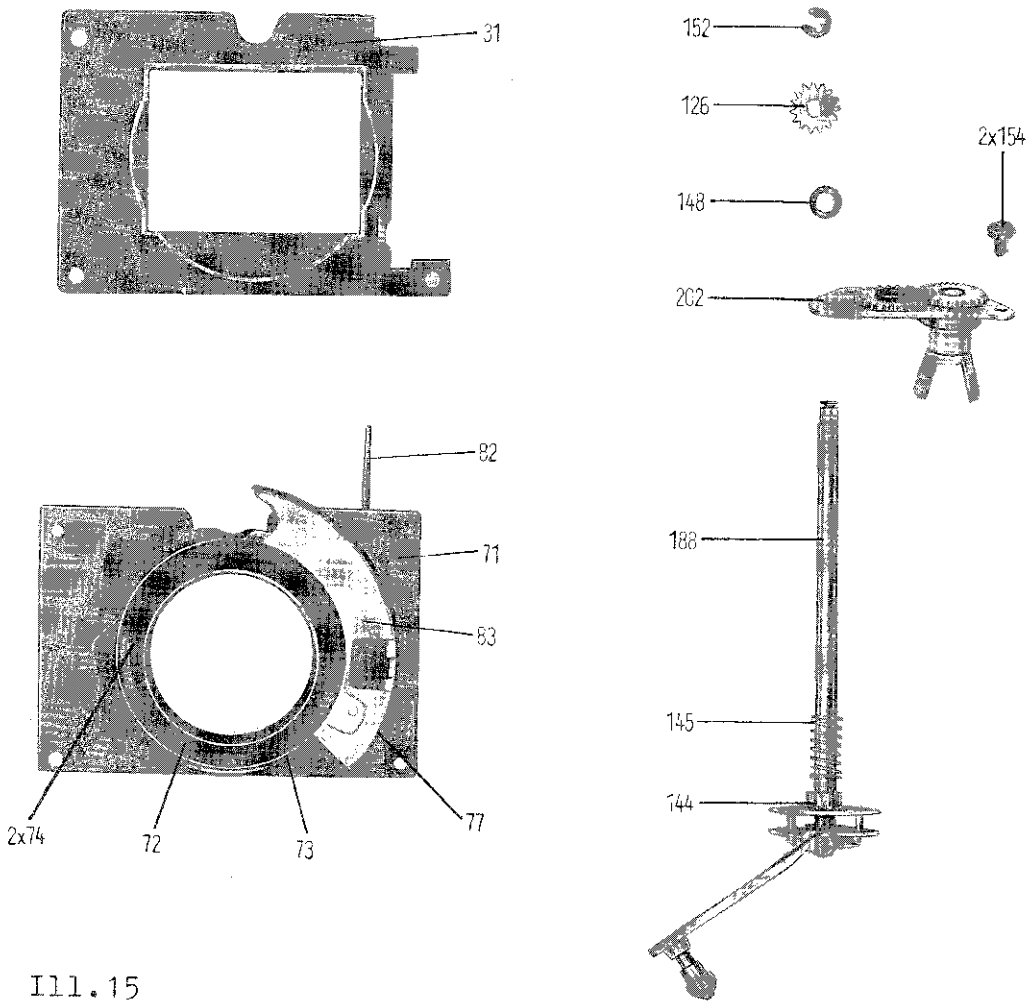

324
37


306
307
317
305

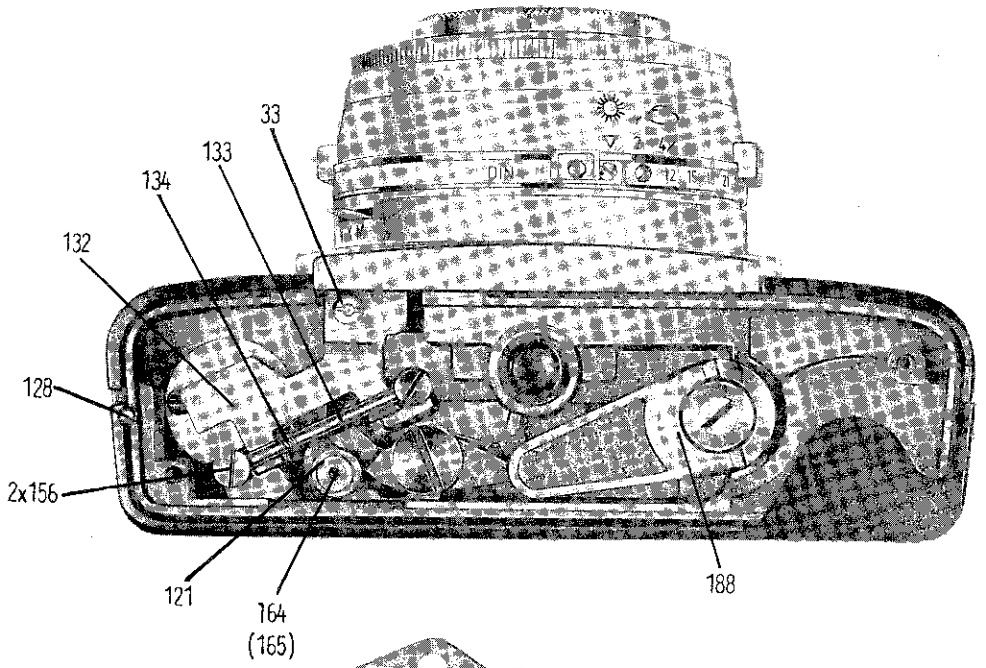
Ill.13

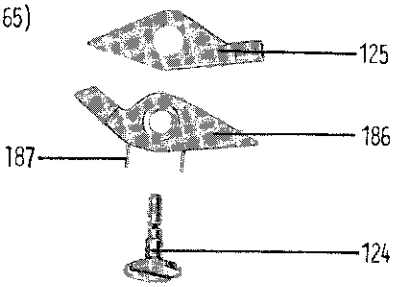

311-316
205
2x207
204
208
206
211

Ill.14


31
152
126
2x154
148
202
82
71
83
188
145
144
2x74
72
73
77

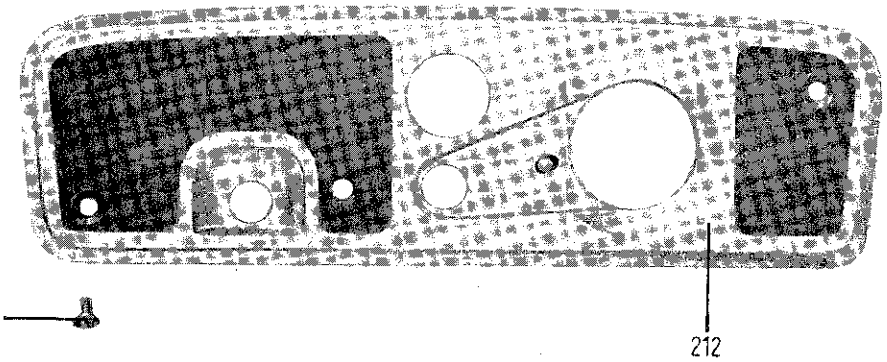
Ill.15

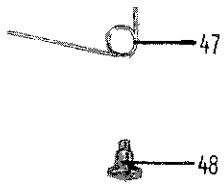

33
133
134
132
128
2x156
121
164
(165)
188


125
186
187
124

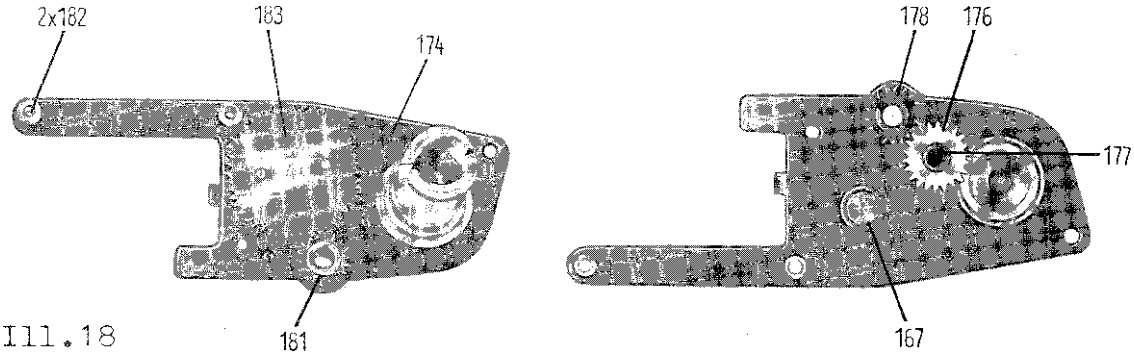
Ill.16

163

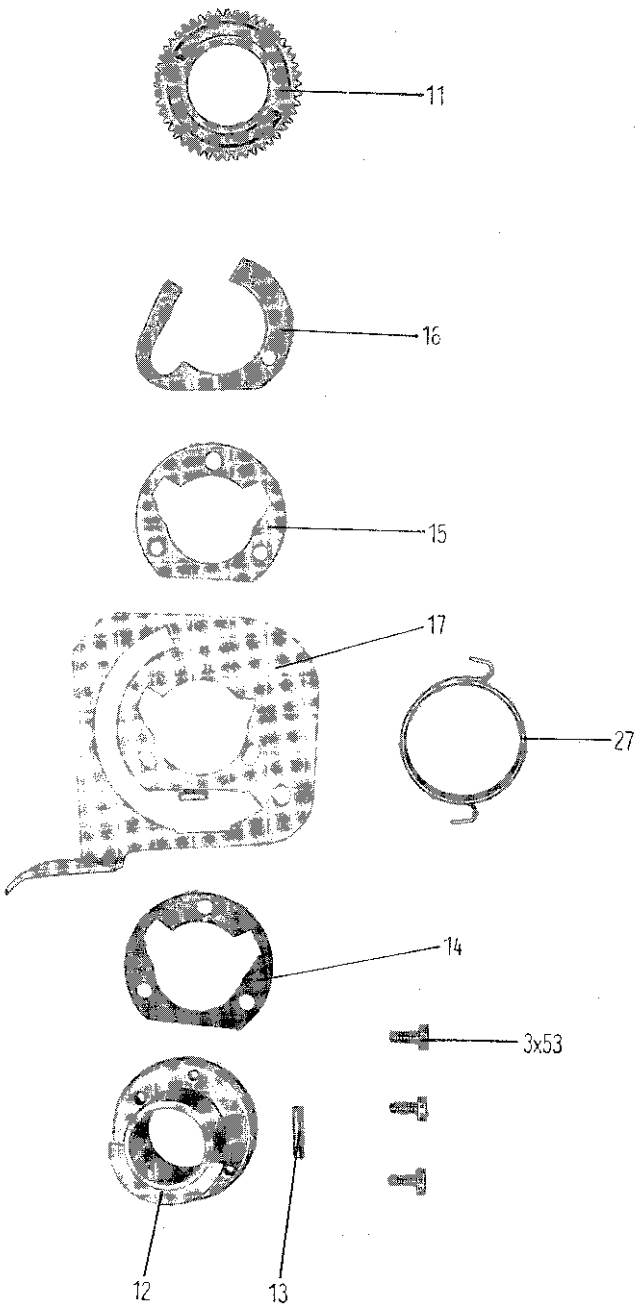

163
212


47
48

Ill.17



Ill.18



Ill.19

Lubrication Plan Contessa matic, No. 10.0634

Unit	Component	Lubrication point	Ill.	Lubricant
Housing compl. 106	Spool axle 111	Sliding and bearing surfaces	page 2	FS 9
	Film sprocket 184	Sliding and bearing surfaces	3	FS 9
	Axle 185	Sliding and bearing surfaces	page 2	FS 9
	Locking catch 136	Sliding points	4	FA 2
	Release flap 132	Bearing points	16	none
	Lever ass. 186	Bearing points	16	OS 1
	Torsion spring 187	Bearing points	16	OS 1
	Lever 125	Bearing points	16	OS 1
	Lever ass. 186	both ends	16	FM 6
Bed Plate ass. 202	Traveller	Bearing points	15	OS 1
	Cogwheels	Bearing points	15	OS 1
Traveller ass. 203	Traveller 204	(Toothing and	7,14	FM 6
	Toothed rod 205	(Slot for shoulder rivet	7,14	FM 6
	Catch 204	Guide slots	14	FS 9
Base Plate ass. 174	Pinion 178	Bearing points	18	OS 1
	Spur wheel 176	Bearing points	18	OS 1
	Spur wheel 181	Bearing points	18	OS 1
	Spur wheel ass. 183	Bearing points	18	OS 1
	Locking washer 167	Bearing points	18	OS 1
		All toothing of base plate ass. 174	18	none
	Spur wheel ass. 183	Both shoulder rivets	18	FM 6
Tube compl. 71	Cup cam 83	Cam range	15	FM 6
	Lever compl. 82	Lever bearing	15	none
	Cup cam 83	Cam bearing	15	none
	Scanning pin 77	Sliding surfaces	15	OS 1
	Winding wheel 32	Bearing	12	OS 1
Spool lever compl. 188	Crank plate 191	Sliding points	15	OS 1
	Spool lever 188	Sliding points	15	OS 1
	Stop plate 144	Bearings	15	OS 1
Front Panel compl.302	Draw rod 303	Sliding points	13	FS 9
Camera back ass. 213	Bearing pin 214	Sliding points	3	none
	Indicator disc 218	Sliding points	5	FA 2
	Threaded pin 128	Hinges	7,16	none
Exp.met. compl. 237	Axle 294	Bearings	8	FM 6
	Lever 295	Sliding and bearing surfaces	8	none

Unit	Component	Lubrication point	III	Lubricant
Camera compl. ass.	Spur wheel 11	Sliding and bearing surfaces	7,19	FM 6
	Sleeve 12	Sliding and bearing surfaces	19	OS 1
	Pin 13	Sliding and bearing surfaces	19	none
	Control ring 23	Bearings	4	none
	Control spring 18	Sliding points	4	none
	Release nipple 25	Sliding points	4	none
	Release rod 28	Sliding points	4	none
	Ring 64 (65)	Sliding surfaces	11	FS 9
	Aperture ring compl. 84	Sliding surfaces	11	FS 9
	Speed setting ring 42	Sliding surfaces	11	FS 9
	Speed scale ring 43	Sliding surfaces	11	FS 9

Sundry items

Apart from the oils and greases mentioned in the lubrication plan, the following preparations are also available :

1. Safety lacquer, black
2. Safety lacquer, chromium - colour
3. Repair lacquer, black (air-drying)
4. Cement 6 106 or Uhu - plus

Note:

Uhu - plus is a commercially available 2 - component adhesive to be used in place of the cement 6 106.
It has the advantage of being ready for use easily and immediately. Uhu - plus can be ordered from us.

Testing-instructions.

A. Mechanical tests and controls

Lens and shutter

1. The filter thread M 27 x 0,5 on the distance setting ring should be undamaged.
2. The distance setting ring
   a) should move smoothly and easily when distances are set.
   b) should have positive stops at either end of its range.
   c) should in no position have a greater axial or radial play than 0,03 mm.
3. The aperture setting ring 84
   a) should unlock and be set uniformly with a torsional moment of 1 200 cmg max. on simultaneous finger-grip pressure so that the aperture setting f/2,8 lies opposite the shutter speed 1/4 second (or 1-2 stops further) and f/22 lies opposite 1/500 sec. when the film speed is set to 100 ASA.
   b) should lock in at all aperture stops and twice between each stop value.

   The film speed setting ring 64 (65)
   a) should unlock when finger pressure is applied to locking spring 104 and permit setting to all values on the film speed scale.
   b) should lock in at all DIN or ASA values and at two intermediate values between each.
5. The shutter speed setting ring 42
   a) should be adjustable to all shutter speed values from 500 to B, according to the settingsof the aperture scale.
   b) should lock positively at shutter speed settings from 500 to B.
   c) should engage and be moved according to the film speed set when aperture values of f/2,8 or f/22 are reached through adiustment of the aperture setting ring.
6. The setting lever for MX synchronization and delayed action
   a) should be adjustable to the M and X positions and lock-in after having been depressed. If the lever has not been depressed it should not be possible to move it from M to X or from X to M.
   b) should only lock into the V position after the shutter has been tensioned.
   c) should permit re-setting from the V setting (whilst the shutter is tensioned) without releassing the shutter.
   d) should spring back to the X setting from the V position at the moment the shutter has completed its run, when the lever was set to V.

Camera back

7. The film type indicator should move smoothly when operated with one finger only. Rotation moment 150 cmg at least.
8. When the camera is closed, the back should be flush with the camera body. There should be no more than 0,2 mm play between the back and the body.
9. When operating the locking catch, the camera back should spring open just enough to be easily opened by hand.

10. The back-locking catch

a) should spring back slightly and lock automatically when the camera back is closed.

b) should securely lock the back so that neither shaking nor tapping by hand will open the camera back.

c) should only slide back to unlock the camera back when a force of at least 300 g is applied.

11. The pressure plate

a) should be undamaged.

b) should exert a pressure of between 500 to 800 g on the outer ribs of the film track.

12. The film guide roller on the back should move smoothly.

Film transport and frame counter

13. The rapid-wind lever

a) should swing freely towards its stop and with a rotation moment not exceeding 3 000 cmg.

b) should spring back to its initial position, abutting against the stop with at least 200 cmg pressure.

c) should resist being operated if the shutter has not been released beforehand. Only a very slight play is permissible between rest position and stop.

14. One complete swing of the rapid-wind lever (without releasing the shutter) from its initial position towards the stop, should cause the teeth of the film transport sprocket to move by not more than 1 mm max.

15. One full swing of the rapid-wind lever to its stop

a) should tension the shutter but without its blades being opened.

b) should rotate the film sprocket roller by 8 teeth (this corresponds to a film advance of 38 mm).

c) should cause the take-up spool (without film) to complete one rotation.

d) should advance the index ring of the frame counter mechanism by one stroke.

16. Swing the rapid-wind lever until it comes to its stop. While the lever is permitted to travel back slowly, it should not be possible to move the film transport roller backwards when the uppermost tooth is subjected to a pressure of 200 g against the direction of the film transport movement. When the lever has reached its starting position, the condition specified under 13c should obtain.

17. The release knob with the scale of the frame counter mechanism

a) should occupy such a position that an imaginary line drawn through the scale graduations 10 and 30 runs parallel to the camera back.Permissible deviation $\pm 5^{0}$. (Figure 1 towards the rear in direction of the camera back).

b) should be secured against displacement.

c) should not rotate when a cable release tightened by hand is unscrewed.

d) should be depressed gently with 1 000 g unobstructed pressure and release the previously tensioned shutter.

18. The index ring 23 of the frame counter mechanism

a) should move in direction of the arrow. Torsional moment 200 - 300 cmg .

b) should lock immediately when turned in the opposite direction.

c) should always be positioned so that the point of the setting mark sets to a graduation stroke on the scale.

19. The take-up spool should rotate on the spindle with a torsional movement of between 140 to 220 cmg.

20. It should be possible to depress the plunger 121 with a pressure of 350 - 450 g and to lock it in this position, whereby

    a) the rewind crank should spring from its rest position,

    b) the film transport sprocket roller is decoupled and should move freely in both directions.

21. The plunger 121 should spring back to its rest position when the rewind crank is pressed home again.

22. The rewind crank should

    a) be securely arrested in its rest position and the film spool catch of rewind should be decoupled

    b) in its working position, engage the film spool catch of the rewind when rotated.

23. The feed spool friction of the film spool catch should not exceed 60 cmg at the rewind.

Exposure meter

24. The exposure meter should be free from dust.

25. When operating the aperture setting ring 84, the follow-up pointer should smoothly follow in both directions. At no point of the range, whatever the position of the camera, should the follow-up pointer touch the exposure meter pointer.

26. Obstructions

    Whatever the position of the camera, the exposure meter pointer's deflections should not jam at any point of its range.

27. Zero position

    At 16 ASA , the aperture setting ring 84 should be rotated (in the direction of 8) until it comes to its stop. The exposure meter pointer should stand under the circle of the follow-up pointer outside the measuring range when the photo-cell ist completely covered. Tolerance: When looked at from above, the pointer of the exposure meter should only just touch the outside or inside of the circle of the follow-up pointer.

28. Balance

    With the exposure meter pointer at zero position and the camera tilted through 30^{0} (backwards or forwards), the pointer should deflect by no more than half the diameter of the circle at the most.

B. Electrical tests and measurements

29. The calibration of the exposure meter must conform to values contained in the tables of the Beli-Prüfkoffer VE 33. The maximal deviation permissible is $\pm$ 1/2 aperture stop value.

30. When the setting lever for MX-synchronization is set to M , a preignition delay should obtain. When set to X, the ignition impulse should take place at the moment when the shutter is fully open. If the type of repair renders it necessary, tests 31 and 32 may be performed.

31. If a direct current of 500 v or an ac.current of 350 v eff. is placed between the nipple bush and the nipple jacket, no spark-over should take place.

32. The insulation resistance between nipple and jacket should be 10 megohms at the least.

C. Optical controls

Lens

33. At full aperture, the 50 mm Tessar f/2,8 should

a) at all settings of the distance scale produce a sharp image in the focal plane at the centre of the film gate, when focused on objects at these distances. (For obtaining maximum definition, a setting tolerance for the front lens ring equal to half the depth-of-field range at full aperture, is permissible besides the appropriate nominal values .)

b) depict with uniform definition images of objects at the same distance (the optical axis thereby being at right angles to the focal plane), when the image points form an imaginary circle of 20 mm in diameter in the focal plane, the circle being symetrical about the centre of the film gate at full aperture. For obtaining maximum definition of image points lying on this imaginary circle, a setting tolerance for the distance setting ring equal to the full depth-of-field range (at full aperture) is permissible on either side of the appropriate nominal values.

The focal plane is the mean film plane and lies 0,18 mm in front of the outer film track ribs (bearing surface of pressure plate). The lens distance settings are relative to the focal plane.

Viewfinder

34. The viewfinder should be free from disturbing reflections.

35 The brightline frame should

a) be aligned parallel to the film gate (not displaced)

b) so aligned that the finder image lies within the tolerance markings given in the viewfinder test table.

D. General Notes

36. The interior of the camera should be free from reflections, that is to say, the negatives should show no trace of exposure caused by reflections.

37. A film wound through the camera in both directions should reveal no trace of scratches within the area of the film gate.

38 The lubrication of the camera should be performed according to the lubrication plan.

Zeiss Ikon AG.
Stuttgart

Ausgabe März 1961
Published March 1961
Edicion Marzo 1961

Ersatzteilliste

List of Spare Parts

Lista de piezas de r.cambio

Contessa matic, Kat. Nr. 10.0634

Für eine schnelle und sachgemäße Bearbeitung eines Ersatzteilauftrages benötigt unser Ersatzteillager alle Angaben aus dem starkumrandeten Teil der Ersatzteilliste.

To ensure quick and proper execution of your spare part order our Spare Part Department requires every information given in the strongly lined column of the List of Spare Parts.

Nuestra sección de piezas de recambio necesita para una ejecución y correcta de sus encargos todos los datos de la parts fuertemente perfilado en la lista de piezas de recambio.

Lfd. Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
11	10.0631-00.001	Stirnrad spur wheel Rueda recta	7, 9		1
12	10.0631-00.002	Hülse sleeve Manguito	19		1
13	10.0631-00.003	Stift pin Perno	19		1
14	10.0631-00.004	Scheibe (Papier) washer (paper) Disco (papel)	19		1
15	10.0631-00.005	Scheibe washer Disco	19		1
16	10.0631-00.006	Federsche be spring plate Arandela elástica	19		1

Lfd. Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
17	10.0631-00.007	Spannhebel tensioning lever Palanca tensora	3,5,19		1
18	10.0631-00.008	Schaltfeder control spring Muelle de avance	4		1
21	10.0631-00.009	Blattfeder leaf spring Muelle de láminas	5		1
22	10.0631-00.010	Scheibe washer Disco	5		1
23	10.0631-00.011	Schaltring control ring Anillo de avance	1,4		1
24	10.0622-00.011	Druckfeder pressure spring Muelle de presión	4		1
25	10.0622-00.026	Auslösenippel release nipple Niple de disparo	1,4,12		1
26	10.1281-00.056	Mutter nut Tuerca	1,4		1
27	10.0631-00.012	Drehfeder torsion spring Muelle de torsión	12,19		1
28	10.0631-00.013	Auslösestange release rod Varilla de disparo	4		1
31	10.0634-00.001A	Tubus tube Tubo	15		1
32	10.0634-00.002	Aufzugsrad winding wheel Rueda para armar	12		1
33	10.0622-00.041	Schlitzmutter slotted nut Tuerca ranurada	13,16		1
34	10.0631-00.021	Gewindenippel threaded nipple Niple roscado	4		1
35	10.0635-00.006	Linsenschraube oval-head screw Tornillo de cabeza lenticular	3,6		2

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
36	10.0631-00.024	Zählscheibe counter disc Disco contador	1,4		1
37	10.0622-00.040	Dichtungsring locking washer Anillo de empaquetadura	13		1
38	10.0634-00.006	Schraube screw Tornillo	3		1
41	10.0634-00.007	Schärfentiefenring depth-of-field ring Anillo de profundidades de foco	1,11,13		1
42	10.0634-00.008	Zeit-Einstellring speed setting ring Anillo de ajuste velocidades	2,11,13		1
43	10.0634-00.009	Zeit-Skalenring speed setting scale Anillo con escala velocidades	1,2,11		1
44	10.0634-00.012	Scheibe 0,05 mm washer 0,05 mm Arandela 0,05 mm	11		n.B.
45	10.0634-00.013	Scheibe 0,1 mm washer 0,1 mm Arandela 0,1 mm	11		n.B.
46	10.0634-00.014	Platte plate Placa	4		1
47	10.0634-00.015	Feder spring Muelle	7,17		1
48	10.0634-00.016	Schraube screw Tornillo	7,17		1
51	M 1,7x7 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	5,8		2
52	M 1,7x5 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	3		4
53	M 1,7x4 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	19		3
54	M 1,7x4,5 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	12		3

Lfd. Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
55	M 1,2x1,5 ZIN 515-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	11		2
56	M 1,7x3 DIN 920-5S	Linsenschraube oval-head screw Tornillo de cabeza lenticular	1,11,13		2
57	M 1,7x2x1,5 ZIN 2926-5S	Gewindestift threaded pin Perno roscado	2,11		1
58	10.0634-00.011	Schraube screw Tornillo	5,6		2
61	1,2 DIN 6799	Sicherungsscheibe locking washer Arandela de aseguramiento	4		1
62	10.0631-00.040 U	Flansch mont. flange ass. Brida mont.	5,12		1
63	10.0622-00.090 AU	Andrückplatte mont. pressure plate, ass. Placa de presión mont.	3		1
64	10.0634-00.020 U	Ring vollst. DIN ring compl. (DIN) Anillo compl. DIN	2,11		1
65	10.0634-00.048 U	Ring vollst. ASA ring compl. (ASA) Anillo compl. ASA	2,11		1
66	10.0634-00.021	Ring für Filmempfindlichkeit film speed ring Anillo para sensibilidad de película		ohne Skala without scale sin escala	1
67	10.1281-10.002	Linsenschraube oval-head screw Tornillo de cabeza lenticular	2,11		2
68	10.0634-00.022	Filmempfindlichkeitsskala (DIN) Film speed scala (DIN) Escala de sensibilidades de película (DIN)	2,11		1
69	10.0634-00.023	Filmempfindlichkeitsskala (ASA) film speed scala (ASA) Escala de sensibilidades de película (ASA)	2,11		1
71	10.0634-00.070 U	Tubus vollst. tube compl. Tubo compl.	15	mit topfkurve 83 with cup cam 83 con curva de copa 83	1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
72	10.0634-00.010	Ring ring Anillo	15		1
73	27,5x30,5x0,05 ZIN 2351-Stb	Scheibe washer Arandela	15		1
74	M 1,4x4 ZIN 2515-5S	Zylinderschraube cylinder screw Tornillo de cabeza lenticular	15		2
75	10.0634-00.028-U	Tubus mont. tube, ass. Tubo mont.	15	ohne Topfkurve 83 without cup cam 83 sin curva de copa 83	1
77	10.0634-00.030	Taststift scanning lever Clavija de contacto	15		1
78	10.0634-00.031	Niet rivet Remache			1
81	1,5x5x0,6 ZIN 2351-Ms	Scheibe washer Arandela			1
82	10.0634-00.034 U	Hebel vollst. lever compl. Palanca compl.	7,15		1
83	10.0634-00.024 U	Topfkurve vollst. cup cam compl. Leva curva de copa compl.	15		1
84	10.0634-00.040 U	Blendenring vollst. aperture compl. Anillo de diafragmas compl.	1,2,11		1
85	10.0622-07.011	Zahnsegment toothed segment Segmento dentado	11		1
86	10.1291-05.047	Senkschraube countersunk screw Tornillo embutido	11		2
87	10.0634-00.043 U	Blendenring mont. aperture ass. Anillo de diafragmas mont.			1
91	10.0634-00.045	Griff grip Asidero	11		1
92	10.0634-00.046	Griff grip Asidero	11		1
93	1x2,5x0,1 ZIN 2351	Scheibe washer Arandela	11		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
94	M 1,4x5 ZIN 2281-5S	Gewindestift threaded pin Perno roscado	11		1
95	10.0634-00.050 U	Kupplungsgriff mont. coupling lever, ass. Asidero de acoplamiento mont.	11		1
96	10.0631-00.045 AU	Bezug kompl. covering compl. Revestimiento compl.			1
97	10.0631-00.046 A	Gehäusebezug body covering Revestimiento de la caja	1		1
98	10.0631-00.047 A	Gehäusebezug body covering Revestimiento de la caja	1		1
101	10.0631-00.048	Bodenbezug base covering Revestimiento del fondo	2		1
102	10.0631-00.049	Bodenbezug base covering Revestimiento del fondo	2		1
103	10.0631-00.050 A	Rückwandbezug camera back covering Revestimiento de la pared trasera	5		1
104	10.0634-00.055 U	Feder vollst. spring compl. Muelle compl.	2,11		1
105	10.0634-00.060 U	Winkel mont. angle compl. Escuadra mont.	6		1
106	10.0634-01.	Gehäuse vollst. body compl. Caja compl.			1
107	10.0634-01.001	Gehäuse body Caja			1
108	10.0622-01.040	Lagerflansch bearing flange Brida de soporte	Seite 2		1
111	10.0622-01.034	Spulenachse spool axle Eje de carret.	Seite 2		1
112	10.0622-01.039	Ring ring Anillo	Seite 2		1
113	10.0622-01.035 C	Druckfeder pressure spring Muelle de presión	Seite 2		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
114	10.0622-01.033	Buchse bush Manguito	Seite 2		1
115	10.0622-01.031	Filmspule film sprocket Carrete de película	3,Seite 2		1
116	10.0631-01002	Stirnrad spur wheel Rueda recta	Seite 2		1
117	10.0631-01.003	Buchse bush Manguito	Seite 2		1
118	10.0631-01.004 A	Buchse bush Manguito	Seite 2		1
121	10.0631-01.005 A	Drücker plunger Pulsador	2,16,Seite 2		1
122	10.0631-01.006	Druckfeder pressure spring Muelle de presión	Seite 2		2
123	10.0631-01.007	Achse axle Eje	12		1
124	10.0631-01.008	Exzenter cam Excêntrica	16		1
125	10.0631-01.009	Hebel lever Palanca	16		1
126	10.0631-01.010	Stirnrad spur wheel Rueda recta	15		1
127	10.0631-01.011	Buchse bush Manguito			1
128	10.0631-01.013	Gewindestift threaded pin Perno roscado	7,16,Seite 2		2
131	10.0622-01.029	Zapfenschraube trunnion screw Tornillo de espiga	Seite 2		1
132	10.0634-01.002	Auslöseklappe release flap Tapa de disparo	16		1
133	10.0622-01.043 A	Achse axle Eje	16		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
134	10.0631-01.015	Drehfeder torsion spring Muelle de torsión	16		1
135	10.0631-01.016	Sperrfeder locking spring Muelle de bloqueo	7		1
136	10.0631-01.018 A	Riegel locking catch Cerrojo	3,4		1
137	10.0631-01.019	Ring ring Anillo	4		2
138	10.0631-01.020	Druckfeder pressure spring Muelle de presion	4		1
141	10.0631-01.021 A	Deckblech cover plate Tapa de chapa	3,4		1
142	10.0631-01.022	Zugfeder draw spring Muelle de extensión	7		1
143	10.0634-01.003	Schaltdraht control wire Alambre de avance	7,12		1
144	10.0631-01.024	Rastteller drop-in plate Platillo de encaje	15		1
145	10.0631-01.025	Druckfeder pressure spring Muelle de presión	15		1
146	10.1271-02.005	Isolierstück insulating piece Pieza aisladora	12		1
147	10.1271-02.006	Kontaktfeder contact spring Muelle de contacto	12		1
148	2,5x4x0,05 ZIN 2351 Stb	Scheibe washer Arandela	15		1
151	M 1,7x5 ZIN 2251-5S	Gewindestift threaded pin Perro roscado	3 Seite 2		1
152	1,5 DIN 6799	Sicherungsscheibe locking washer Disco de aseguramiento	15 Seite 2		2
153	M 1,7x7 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	7		2

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilusir.	Bemerkung Notes Nota	Stück Piece pieza
154	M 1,7x3 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	7,15 Seite 2		4
155	M 1,7x3,5 ZIN 2084-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	7		2
156	M 1,7x4,5 ZIN 516-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	16		2
157	M 1,7x3 ZIN 511-5S	Senkschraube countersunk screw Tornillo embutido	3,4		2
158	M 1,7x2 DIN 927-5S	Zapfenschraube trunnion screw Torni lo con espiga	7		1
161	M 1,7x2,5 DIN 553-5S	Gewindestift threaded pin Perno roscado	Seite 2		3
162	M 1,7x3 DIN 553-5S	Gewindestift threaded pin Perno roscado	7		1
163	M 1,7x3,5 DIN 63-5S	Senkschraube countersunk screw Tornillo embutido	17		2
164	M 1,4x3 ZIN 515-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	16 Seite 2	wahlweise optional a discreción	(1)
165	M 1,4x3,5 ZIN 515-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	16 Seite 2	wahlweise optional a discreción	(1)
166	2,8x5,8x0,3 ZIN 2351	Scheibe washer Arandela	Seite 2		1
167	3,2 DIN 6799	Sicherungsscheibe locking washer Disco de aseguramiento	18 Seite 2		1
168	2x0,6 ZIN 2363	Greifring grip ring Anillo de sujeción	7		1
169	2,2x4xC,1 ZIN 2351	Scheibe washer Arandela	7		1
171	1,6x4x0,5 ZIN 2351	Scheibe washer Arandela	12		1
172	M 1,7x3 ZIN 2515	Zylinderschraube cylinder screw Tornillo cilíndrico	12		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
173	3,5x5,5x0,2 ZIN 2351	Scheibe washer Arandela	Seite 2		(1)
174	10.0631-01.029 U	Grundplatte mont. base plate, ass. Placa base mont.	7,18 Seite 2		1
175	10.0631-01.030	Grundplatte base plate Placa base			1
176	10.0631-01.032	Stirnrad spur wheel Rueda recta	18		1
177	10.0631-01.033	Ansatzniet shoulder rivet Remache de inserción	18		1
178	10.0631-01.034	Ritzel pinion Pinón	18		1
181	10.0631-01.035	Stirnrad spur wheel Rueda recta	18		1
182	10.0631-01.036	Buchse bush Manguito	18		2
183	10.0631-01.039 U	Stirnrad mont. spur wheel, ass. Rueda recta mont.	7,18 Seite 2		1
184	10.0631-01.045 U	Filmtrommel film sprocket Tambur de película	3 Seite 2		1
185	10.0631-01.048 U	Achse mont. axle ass. Eje mont.	Seite 2		1
186	10.0631-01.052 U	Hebel mont. lever ass. Palanca mont.	16		1
187	10.0631-01.055	Drehfeder torsion spring Muelle de torsión	16		1
188	10.0631-01.060 U	Spulhebel vollst. spool lever, compl. Palanca de rebobinado compl.	2,15,16		1
191	10.0631-01.061	Kurbelteller crank plate Platillo de manivela			1
192	10.0631-01.063	Achse axle Eje			1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
193	1x3 DIN 1472	Paßkerbstift slotted crossbar pin Clavija hendida de ajuste			2
194	1x5 DIN 1475	Knebelkerbstift capstan screw Clavija hendida de muletilla			1
195	3x5x0,1 ZIN 2351	Scheibe washer Arandela			1
196	10.0631-01.065 U	Spulhebel mont. spool lever, ass. Palanca de rebobinado mont.			1
197	10.0631-01.066	Spulhebel spool lever Palanca de rebobinado			1
198	10.0631-01.067	Kurbelgriff crank handle Empuñadura de manivela			1
201	10.0631-01.068	Bezug covering Revestimiento	2		1
202	10.0631-01.069 U	Platine mont. bed plate, ass. Platina mont.	7,15		1
203	10.0631-01.073 U	Mitnehmer mont. traveller, ass. Arrastrador mont.	7,12		1
204	10.0631-01.074	Mitnehmer traveller Arrastrador	14		1
205	10.0631-01.075	Zahnstange toothed rod (rack) Cremallera	14		1
206	10.0631-01.076	Exzenter cam Excéntrica	14		1
207	10.0631-01.077	Niet rivet Remache	14		2
208	10.0631-01.078 A	Zugfeder draw spring Muelle de extensión	14		1
211	M 1,4x2,5 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	14		1
212	10.0631-01.081 U	Kappe mont. capping, ass. Casquete mont.	2,17 Seite 2		1

Lfd. Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
213	10.0631-04.000	Rückwand mont. camera back, ass. Pared trasera mont.	3	siehe Anmerkung Seite 6 see note on page 6 véase nota página 6	1
214	10.1281-09.020	Gleitrolle film guide roller Rodillo de deslizamiento	3		1
215	10.0631-04.003	Zylinderniet cylinder rivet Remache cilíndrico			1
216	1x2,2 ZIN 503	Halbrundniet buttonhead rivet Remache semiesférico	5		4
217	10.0631-04.004 A	Skala scale Escala	5		1
218	10.0631-04.009	Federscheibe spring plate Disco elástico	5		1
219	10.0631-04.007 U	Merkscheibe mont. dial, ass. Disco indicador mont.	5		1
221	10.0634-02.000	Deckkappe vollst. top capping, ass. Tapa compl.	6		1
222	10.0634-02.000 A	Deckkappe vollst. top capping, ass. Tapa compl.	1,6		1
223	34.0611-00.060	Steckschuh accessory shoe Zapata	6		1
224	20.1500-00.026	Andrückfeder pressure spring Muelle de presión	6		1
225	10.1281-00.034	Zylinderniet cylinder rivet Remache cilíndrico	6		1
226	10.1281-00.035	Senkniet countersunk rivet Remache embutido	6		2
227	10.0631-02.002	Niet rivet Remache	6		1
228	10.0631-02.004	Suchereinblick finder eyepiece Mirilla del visor	6		1
231	10.0634-02.007 A	Fenster window Ventanilla	6		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
232	10.0635-02.002	Niet rivet Remache	6		1
233	10.0631-02.103 U	Platte mont. plate, ass. Placa mont.	6		1
234	10.0631-02.005	Feder spring Muelle	6		1
235	10.0631-02.006	Feder spring Muelle	6		1
236	10.0631-02.008 U	Kontaktnippel mont. contact nipple Niple de contacto mont.		zu 233 for 233 para 233	1
237	10.0634-03	Beli-Gehäuse vollst. exp.-met. body, compl. Caja del exposímetro cpl.	5,8,9		1
238	10.0634-03.001	Beligehäuse exp.-met. body Caja del exposímetro			1
241	10.0634-03.002	Gitterblende baffle Rejilla	9		1
242	10.0634-03.003	Wabenscheibe honeycomb disc Disco de panal	9		1
243	10.0634-03.006	Isolierplatte insulating plate Placa aisladora	9		1
244	10.0634-03.007	Nachführzeiger follow-up pointer Aguja de ajuste	9		1
245	10.0622-03.016	Sechskantschraube hexagon cap screw Tornillo hexagonal	9		1
246	10.0622-03.014	Scheibe washer Arandela		zu 244 for 244 para 244	2
247	10.0634-03.009	Schraube screw Tornillo	8		1
248	10.0622-03.043	Isolierplatte insulating plate Placa aisladora	9		1
251	10.0634-03.010	Fotoelement photo-cell Fotoelemento	9		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
252	10.0634-03.011	Scheibe washer Arandela	8		1
253	10.0622-03.030	Widerstand resistor Resistencia	9		1
254	20.2402-00.028	Heißleiter thermistor Resistencia de compensación	9		1
255	10.0634-03.012	Feder spring Muelle	8		1
256	10.0634-03.013	Deckel lid Tapa	8		1
257	10.0634-03.014 B	Plexiglasscheibe plastic glass sheet (pane) Hoja de plexiglas	9		1
258	10.0634-03.015	Maske mask Mascarilla	9		1
261	10.0634-03.016	Glasscheibe glass sheet Hoja de vidrio	9		1
262	10.0634-03.017	Feder spring Muelle	9		1
263	10.0631-03.015	Feder spring Muelle	9		1
264	10.0631-03.006	Spiegel mirror Espejo	9		1
265	10.0631-03.014	Feder spring Muelle	9		1
266	10.0631-03.003	Okularlinse finder lens Lente del ocular	9		1
267	10.0631-03.013	Feder spring Muelle	9		1
268	10.0631-03.005	Spiegel mirror Espejo	9		1
271	10.0631-03.012	Feder spring Muelle	9		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
272	10.0635-03.006	Objektivlinse lens Lente	9		1
273	10.0622-00.030	Unterlagscheibe spacer Arandela		zu 294 for 294 para 294	1
274	10.0622-03.023	Papierstreifen paper strip Tira de papel	9		2
275	10.0627-02.010	Feder spring Muelle	9		1
276	10.0634-03.018 A	Scheibe washer Arandela	9		1
277	10.0634-03.019	Lötfahne solder lug Oreja para soldar			1
278	10.0634-03.020	Einlage lining Pieza de inserción	9		1
281	10.0634-03.021	Deckblech cover sheet Tapa de chapa	8		1
282	10.0635-03.012	Rahmen frame Marco	9		1
283	10.0634-03.024	Abdeckplättchen washer Plaquita para tapar		zu 256 for 256 para 256	1
285	10.0631-03.022	Linse lens Lente	9		1
286	M 1,4x7,3 ZIN 515	Zylinderschraube cylinder screw Tornillo cilíndrico	8		2
287	M 1,7x3,5 ZIN 515	Zylinderschraube cylinder screw Tornillo cilíndrico	8		2
288	2,4x0,5 ZIN 2351	Scheibe washer Arandela	9		1
291	M 1,7x3 DIN 84-5S	Zylinderschraube cylinder screw Tornillo cilíndrico	9		1
292	M 1,7x4,5 ZIN 2551	Gewindestift threaded pin Perno roscado			1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
293	M 1,7x2,5 ZIN 2084	Zylinderschraube cylinder screw Tornillo cilíndrico	8		1
294	10.0634-03.027 U	Achse vollst. axle, compl. Eje compl.	8		1
295	10.0634-03.030 AU	Hebel vollst. lever, compl. Palanca compl.	8		1
296	10.0622-03.040 U	Kontaktplatte vollst. contact plate, ass. Placa de contacto compl.	9		1
297	10.0622-03.041	Kontaktplatte contact plate Placa de contacto			1
298	10.0622-03.042	Lötöse soldering tab Anillo de soldar	9		3
301	20.2524	K-Instrument k-instrument Instrumento K	8		1
302	10.0634-04	Frontplatte vollst. front plate, ass. Placa frontal compl.	13		1
303	10.0634-04.001	Zugstange draw rod Tirante	13		1
304	10.0634-04.002	Feder spring Muelle	13		1
305	10.0634-04.003	Buchse bush Manguito	13		1
306	10.0634-04.004	Druckfeder pressure spring Muelle de presión	13		1
307	10.0634-04.005	Bolzen bolt Perno	13		1
308	10.0634-04.006	Frontdeckkappe front cover cap Tapa frontal	13		1
311	10.0634-04.012	Abstimm-Scheibe 0,05 mm spacer 0,05 mm Arandela de ajuste 0,05 mm	14		n.B. as req. a discr.
312	10.0634-04.013	Abstimm-Scheibe 0,1 mm spacer 0,1 mm Arandela de ajuste 0,1 mm	14		n.B. as req. a discr.

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Bild Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
313	10.0634-04.014	Abstimm-Scheibe 0,15 mm spacer 0,15 mm Arandela de ajuste 0,15 mm	14		n.B. as req. a discr.
314	10.0634-04.015	Abstimm-Scheibe 0,2 mm spacer 0,2 mm Arandela de ajuste 0,2 mm	14		n.B. as req. a discr.
315	10.0634-04.016	Abstimm-Scheibe 0,4 mm spacer 0,4 mm Arandela de ajuste 0,4 mm	14		n.B. as req. a discr.
316	10.0634-04.031	Abstimm-Scheibe 0,6 mm spacer 0,6 mm Arandela de ajuste 0,6 mm	14		n.B. as req. a discr.
317	1,2 DIN 6799	Sicherungsscheibe locking washer Arandela de aseguramiento	13		1
318	M 1,7x4 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	13		4
321	M 1,7x5 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	13		4
322	10.0634-04.018 AU	Frontplatte mont. front plate, ass. Placa frontal mont.	13		1
323	10.0622-08.005	Bolzen bolt Perno	13		1
324	10.0634-05	Prontor-SVS-Verschluß X 481 d Prontor-SVS-shutter X 481 d Obturador Prontor SVS X 481 d	13		1
325	10.0634-05.003 U	E-Ring vollst.(Meter) distance ring, compl.(met.) Anillo telemétrico compl.(metros	1		1
326	M 1,2x2,5 DIN 553	Gewindestift threaded pin Perno roscado	1		3
327	10.0634-05.005 U	E-Ring vollst. (Feet) distance ring, compl. (feet) Anillo telemétrico compl.(feet)	1		1

Provisional edition March 1961

Special tools for Contessa matic Cat. No. 10.0634

The following special tools are required for servicing the Contessa matic:

	Order No.
Weight for rewind friction	54-00.000/703
Key for winding shutter	62-00.000/801
Pliers for nut	527/24 CM/82
Key for threaded nipple (in place of 527/24 CM/80)	56-00.000/800
Special screwdriver for slotted nut	26 376 T/80
Tensioning key	527/24/82
Shearing tool for counter disc	527/24 CM/81
Pliers for nut	527/24 CM/83
Special screwdriver for front plate	526/24 M/81
Rotation-moment tester for film spool	526/24 M/72
Key for opening shutter	56-05.000/800
Key for rear lens element	54-06.000/800
Spanner for cam	52-01.076/800

All the special tools listed above for use with the Contessa matic are already employed with the Symbolica 10.0635 and Tenax 10.0651

Zeiss Ikon AG
Stuttgart

Die beiliegende Reparaturanleitung für Contessa, Kat.-Nr. 10.0632 ist nur in Verbindung mit der Reparaturanleitung für Contessa matic, Kat.-Nr. 10.0634 vollständig.
Die Anleitung für Contessa 10.0632 ist deshalb an die Anleitung für Contessa matic 10.0634 anzuheften.

The enclosed repair-instructions for Contessa, Cat.No. 10.0632 are complete only in connection with the repair-instructions for Contessa matic, Cat.No. 10.0634.
Therefore the repair-instructions for Contessa 10.0632 should be attached to the instructions for Contessa matic.10.0634.

La adjunta instrucción de reparación para la Contessa No. 10.0632 solamente está completa junto con la instrucción de reparación para la Contessa matic 10.0634.
Hagan el favor de agregar, por lo tanto, la instrucción para la Contessa 10.0632 a la instrucción para la Contessa matic 10.0634.

Zeiss Ikon AG
Stuttgart

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Repair Instructions Contessa, Cat. No. 10.0632

(Complete only in connection with repair instructions for Contessa matic 10.0634).

General notes

The Contessa, Cat. No. 10.0632 possesses the following features :

Shutter : Pronto with speeds from 1/30 sec to 1/250 sec, B, X synchronization and delayed action release.

Lens : Tessar f/2.8 , 50 mm, front lens focusing.

Exposure meter : With follow-up pointer, externally visible on top capping. Not coupled with the shutter.

The construction of the Contessa 10.0632 is very similar to that of the Contessa matic 10.0634.

The counter mechanism, film transport, rewind mechanism, camera back and brightline viewfinder are incorporated completely unaltered from the design of the Contessa matic 10.0634.

New component parts : Exposure meter, front plate with shutter and top capping. (Ill. 21 - 24) .

Note ! When ordering spare parts, both the order number and the name of part (as outlined with bold lines in the spare part list) should be quoted.

Slight variations may be encountered as a result of technical improvements.

Dismantling

To remove the shutter the key 63-04.001/801 is required. Prior to lifting out top capping 445, remove screw 416, ring 415, diaphragm disc 438 (441), spring washer 414, scale 412 (413), washer 411, washer 423, (424, 425) as req., washer 418 (421) as req., speed ring ass. 437 and washer 417.

All further instructions for dismantling are described in the instructions for Contessa matic 10.0634.

Assembly and repair instructions

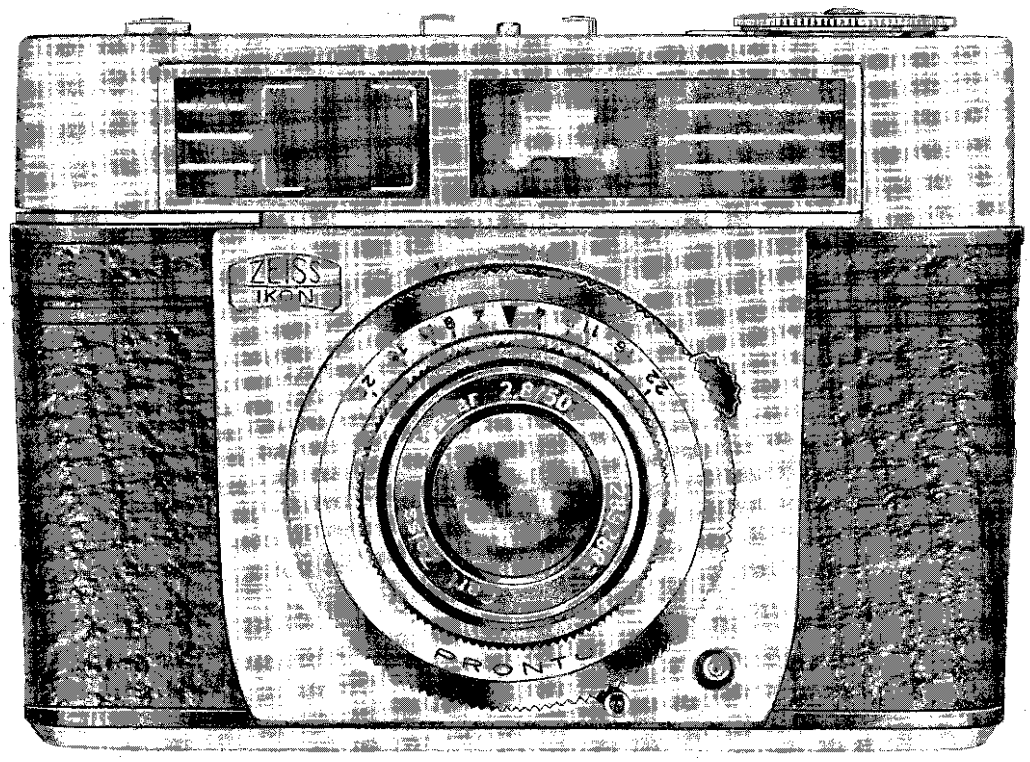
All necessary instructions for assembly and adjustments are described in the repair instructions for Contessa matic 10.0634.

Lubrication and testing instructions

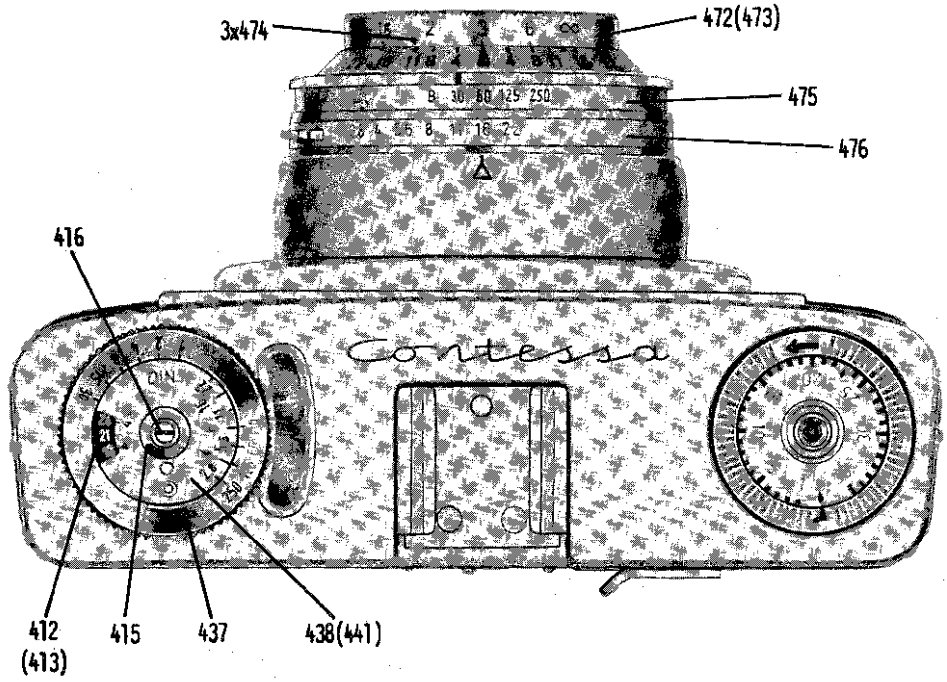
Both lubrication and testing instructions given for the Contessa matic 10.0634 apply also.

Special tools

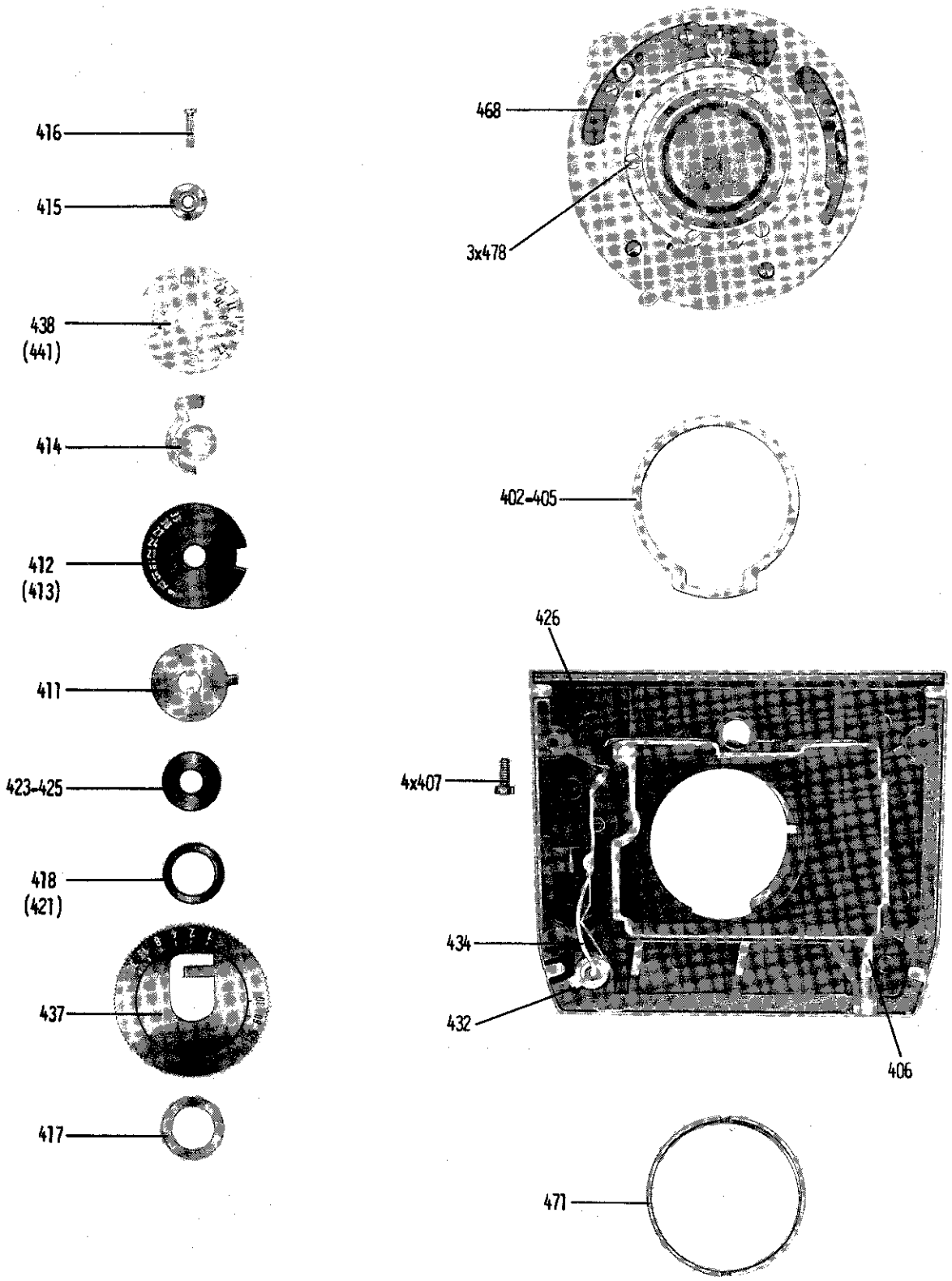
When repairing the Contessa 10.0632, the special tools for Contessa matic 10.0634 can be used. In addition the key 63-04.001/801 for tightening the screw on ring 471 is required. The key 63-04.001/801 is already used for Continette 10.0625.


ZEISS
IKON
PRONTOR

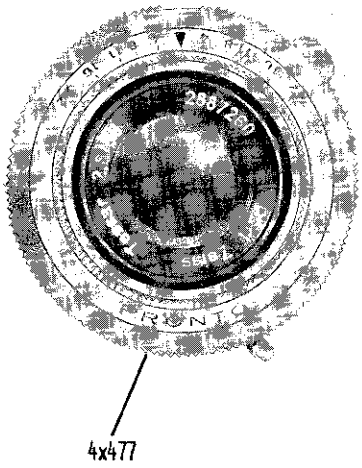
Ill.21


3x474
472(473)
475
476
416
Contessa
412
(413)
415
437
438(441)

Ill.22


416
415
438
(441)
414
412
(413)
411
423-425
418
(421)
437
417
468
3x478
402-405
426
4x407
434
432
406
471

Ill.23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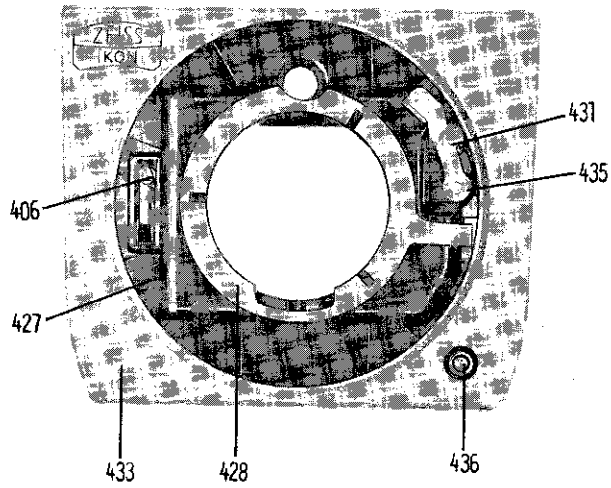
406
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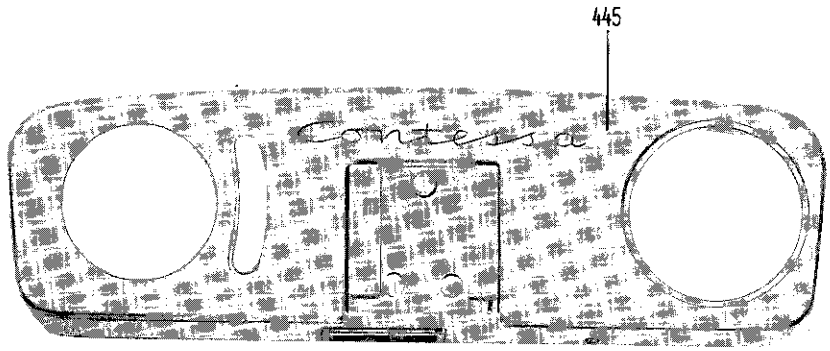
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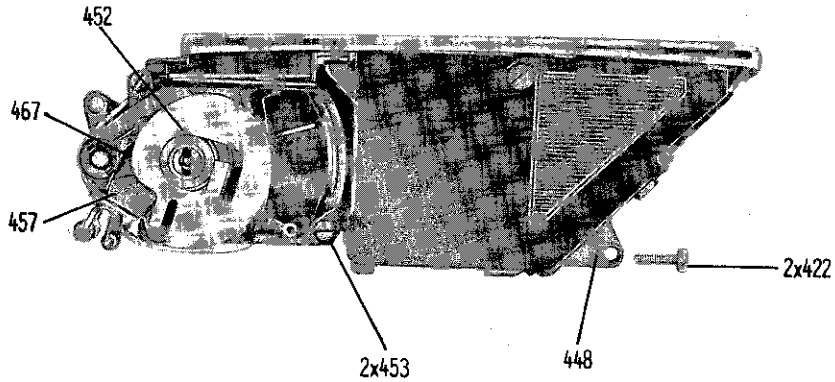
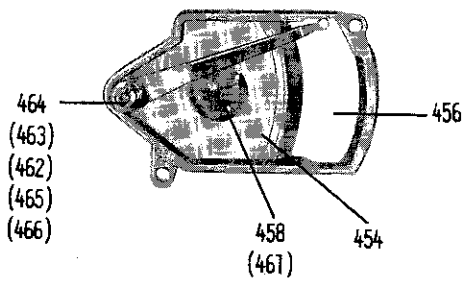

452
467
457
2x453
448
2x422


464
(463)
(462)
(465)
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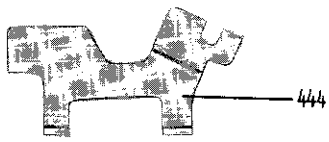
458
(461)
454
456


444

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Ersatzteilliste
List of Spare Parts
Lista de piezas de recambio
Contessa, Kat. Nr. 10.0632

Diese Ersatzteilliste enthält nur diejenigen Teile, welche bei der Contessa 10.0632 neu hinzugekommen sind. Alle anderen Teile sind von der Contessa matic 10.0634 übernommen und in der Ersatzteilliste für Contessa matic 10.0634 aufgeführt.
Für eine schnelle und sachgemäße Bearbeitung eines Ersatzteilauftrages benötigt unser Ersatzteillager alle Angaben aus dem starkumrandeten Teil der Ersatzteilliste.(Bestellnummer und Bezeichnung).

This list of spare parts contains only those parts which are additionally employed in the Contessa 10.0632. All other parts are those employed in the Contessa matic 10.0634 and listed in the spare part list of the Contessa matic 10.0634.
To ensure quick and proper execution of your spare part order our Spare Part Department requires every information given in the strongly lined calumn of the Spare Part list. (Order No. and name of part).

Esta lista de piezas de recambio contiene solamente aquellas piezas que han sido agregadas a la Contessa 10.0632. Todas las demás partes son las de la Contessa matic 10.0634 enumeradas en la lista de piezas de recambio para la Contessa matic 10.0634.
Nuestra sección de piezas de recambio para una ejecución y correcta de sus encargos todos los datos de la parts fuertemente perfilado en la lista de piezas de recambio. (Número de pedido y designación).

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. Ill.	Bemerkung Notes Nota	Stück Piece pieza
402	10.0624-00.008	Scheibe 0,05 mm spacer 0,05 mm Arandela 0,05 mm	23		n.B. as req. a discr.
403	10.0624-00.009	Scheibe 0,1 mm spacer 0,1 mm Arandela 0,1 mm	23		n.B. as req. a discr.
404	10.0624-00.010	Scheibe 0,15 mm spacer 0,15 mm Arandela 0,15 mm	23		n.B. as req. a discr.
405	10.0624-00.011	Scheibe 0,4 mm spacer 0,4 mm Arandela 0,4 mm	23		n.B. as req. a discr.
406	10.0630-00.002	Zugstange draw rod Tirante	23,24		1
407	10.0628-00.007	Schraube screw Tornillo	23		4
411	10.0632-00.001	Scheibe washer Arandela	23		1
412	10.0632-00.002	Skalenscheibe (DIN) scale (DIN) Escala (DIN)	22,23		1

Lfd.Nr. No. no:.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. Ill.	Bemerkung Notes Nota	Stück Piece pieza
413	10.0632-00.003	Skalenscheibe (ASA) scale (ASA) Escala (ASA)	22,23		1
414	10.0632-00.004	Federscheibe spring washer Arandela elástica	23		1
415	10.0632-00.005	Ring ring Anillo	22,23		1
416	10.0632-00.006	Schraube screw Tornillo	22,23		1
417	7,5x10,5x0,5 ZIN 2351	Scheibe washer Arandela	23		1
418	7,5x10,5x0,05 ZIN 2351	Scheibe 0,05 mm washer 0,05 mm Arandela 0,05 mm	23		n.B. as req. a discr.
421	7,5x10,5x0,1 ZIN 2351	Scheibe 0,1 mm washer 0,1 mm Arandela 0,1 mm	23		n.B. as req. a discr.
422	M 1,7x6,5 DIN 84 - 5 S	Zylinderschraube cylinder screw Tornillo cilíndrico	24		2
423	4x10x0,5 ZIN 2351	Scheibe 0,5 mm washer 0,5 mm Arandela 0,5 mm	23		n.B. asreq. a discr.
424	4x10x0,2 ZIN 2351	Scheibe 0,2 mm washer 0,2 mm Arandela 0,2 mm	23		n.B. as req a discr.
425	4x10x0,1 ZIN 2351	Scheibe 0,1 mm [illegible] mm Arandela 0,1 mm	23		n.B. as req. a discr.
426	10.0632-00.010 U	Frontplatte mont. Front plate, ass. Placa frontal mont.	23	ohne Objektiv without lens sin objectivo	1
427	10.0630-00.011	Frontplatte front plate Placa frontal	24		1
428	10.0632-00.007	Kontaktscheibe contact plate Placa de contacto	24		1
431	10.0630-00.012	Kontaktfeder contact spring Muelle de contacto	24		1
432	10.0632-00.013	Lötfahne soldering tag chapita soldada	23		1
433	10.0632-00.014	Frontdeckkappe front cover cap Tapa frontal	24		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. Ill.	Bemerkung Notes Nota	Stück Piece pieza
434	10.0632-00.015	Schaltdraht control wire Alambre de avance	23		1
435	B 2x0,3x3 DIN 7340	Rohrniet rivet remache	24		1
436	10.1281-05.020 U	Kontaktnippel mont. contact nippel, ass. Niple de contacto mont.	24		1
437	10.0632-00.020 U	Zeitring mont. speed ring Anillo de velocidades	22,23		1
438	10.0632-00.025 U	Blendenscheibe mont. DIN diaphragm disc, ass. DIN Disco de diafragma mont. DIN	22,23		1
441	10.0632-00.030 U	Blendenscheibe mont. ASA diaphragm disc, ass. ASA Disco de diafragma mont. ASA	22,23		1
442	10.0632-01.000	Gehäuse vollst. body compl. Caja compl.			1
443	10.0632-01.001	Gehäuse body Caja			1
444	10.0631-01.014	Auslöseklappe release flap Tapa de disparo	24		1
445	10.0632-02.000	Deckkappe vollst. top capping, ass. Tapa compl.	24		1
448	10.0632-03.000	Beli-Gehäuse vollst. exp.-meter body, compl. Caja del exposimetro cpl.	24		1
451	10.0532-03.001	Beligehäuse exp.-meter body Caja del expsimetro			1
452	10.0532-03.002	Kurve cam Curva	24		1
453	M 1,7x4 ZIN 515 5S	Zylinderschraube cylinder screw Tornillo cilíndrico	24		2
454	10.0632-03.010 U	Deckel vollst. cover compl. Tapa cpl.	24		1
455	10.0632-03.011	Deckel cover Tapa			1
456	10.0632-03.012	Fenster window Ventanilla	24		1

Lfd. Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. Ill.	Bemerkung Notes Nota	Stück Piece pieza
457	10.0632-03.013	Feder spring Muelle	24		1
458	10.0632-03.014	Scheibe washer Arandela	24		1
461	M 1,7 DIN 934	Sechskantmutter hexagon nut Tuerca hexagonal	24		1
462	1,5x4x0,2 ZIN 2351	Scheibe 0,2 mm washer 0,2 mm Arandela 0,2 mm	24		1
463	1,5x4x0,5 ZIN 2351	Scheibe 0,5 mm washer 0,5 mm Arandela 0,5 mm	24		1
464	M 1,4 DIN 546	Schlitzmutter slotted nut Tuerca ranurada	24		1
465	2,5x4,5x0,05 ZIN 2351	Scheibe 0,05 mm washer 0,05 mm Arandela 0,05 mm	24		n.B. as req. a discr.
466	2,5x4,5x0,1 ZIN 2351	Scheibe 0,1 mm washer 0,1 mm Arandela 0,1 mm	24		n.B. as req. a discr.
467	10.0632-03.016 U	Hebel vollst. Lever compl. Palanca compl.	24		1
468	10.0630-04.000	Verschluß Pronto 597 b 3 Pronto-shutter 597 b 3 Obturador Pronto 597 b 3	23	mit Objektiv with lens con objectivo	1
471	10.0528-00.008	Anschraubring screw-on-ring Anillo para atornillev	23		1
472	10.0634-05.003 U	E-Ring vollst. (meter) distance ring , compl.(meter) Anillo telemétrico compl.(metros)	22		1
473	10.0634-05.006 U	E-Ring vollst. (feet) distance ring, compl. (feet) Anillo telemétrico compl.(feet)	22		1
474	M 1,2x2,5 DIN 553	Gewindestift threaded pin Perno roscado	22		3
475	597 b 1 - 534	Zeitskala speed-scale escala de velocidades	22		1
476	597 b 1 - 134	Blendenskala diaphragm-scale escala de diafragma	22		1
477	00476 - 135	Schraube screw Tornillo	24	zu 475 und 476 for 475 and 476 para 475 y 476	4
478	00475 - 575	Schraube screw Tornillo	23		3